COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

DONALD L. WOLFE, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
www.ladpw.org

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: MP-6
4.041

October 20, 2005

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

RIO HONDO CHANNEL - A PORTION OF PARCELS 450, 485, P-648F, AND P-654F
GRANT OF EASEMENT - CITY OF SOUTH GATE
SUPERVISORIAL DISTRICT 1
3 VOTES

IT IS RECOMMENDED THAT YOUR BOARD ACTING AS THE GOVERNING BODY OF THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT:

1. Acting as a responsible agency pursuant to the California Environmental Quality Act (CEQA), consider the enclosed Negative Declaration/Finding of No Significant Impact document and the Environmental Reevaluation/Addendum, which were prepared by Caltrans for the Interstate Route 710/Firestone Boulevard, Phase III - Improvements Over Rio Hondo Channel project on March 27, 1997, and November 24, 2003, respectively; find that the granting of the recommended easement is within the scope of the proposed project; find that the proposed project will not have a significant effect on the environment; find that the Negative Declaration/Finding of No Significant Impact document and the Environmental Reevaluation/Addendum reflect the independent judgment of the County; and approve the Negative Declaration/Finding of No Significant Impact document and the Environmental Reevaluation/Addendum.

2. Approve the grant of an easement for road and bridge purposes, from the Los Angeles County Flood Control District to the City of South Gate, within Rio Hondo Channel, Parcels 450, 485, P-648F, and P-654F (10,426± square feet), for $46,850. The parcels are located east of Garfield Avenue and north and south of Firestone Boulevard, over the Rio Hondo Channel, in the City of South Gate.

3. Instruct the Chair to sign the enclosed Easement document and authorize delivery to the Grantee.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

This action will allow the District to grant an easement for road and bridge purposes within Rio Hondo Channel, Parcels 450, 485, P-648F, and P-654F, to the City of South Gate. The City of South Gate requested the easement in connection with the Interstate Route 710/Firestone Boulevard, Phase III - Improvements over the Rio Hondo Channel project. The granting of this easement is not considered adverse to the District's purposes. Moreover, the instrument reserves paramount rights for the District's interest.

Implementation of Strategic Plan Goals

This action meets the County Strategic Plan Goal of Fiscal Responsibility. The revenue from this transaction will be used for flood control purposes.

FISCAL IMPACT/FINANCING

The City of South Gate has paid $46,850 for the easement, for road and bridge purposes, and $29,450 for the temporary construction rights. These values represent the market value. These amounts have been deposited into the Flood Control District Fund.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The granting of this easement will not hinder the use of the channel for possible transportation, utility, or recreational corridors.

The enclosed Easement document has been approved by County Counsel and will be recorded.

ENVIRONMENTAL DOCUMENTATION

CEQA requires public agency decision makers to document and consider the environmental impacts of their actions. Caltrans is the lead agency for this project. The Interstate Route 710/Firestone Boulevard, Phase III - Improvements Over Rio Hondo Channel project's Negative Declaration/Finding of No Significant Impact document and its Environmental Reevaluation/Addendum were approved by Caltrans on March 27, 1997, and November 24, 2003, respectively.

The City of South Gate is a responsible agency with reference to this project. The City of South Gate considered Caltrans' Negative Declaration/Finding of No Significant Impact document and made the required CEQA findings.

Under CEQA, the County is a responsible agency whose discretionary approval of the proposed project is required in order for the proposed project to be implemented. As a responsible agency, your Board must consider and adopt the Negative Declaration/Finding of No Significant Impact document and the Environmental Reevaluation/Addendum, prepared by Caltrans, before the proposed project is approved and the recommended easement is granted.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

None.

CONCLUSION

Enclosed are an original and duplicate of the Easement document. Please have the original and duplicate signed by the Chair and acknowledged by the Executive Officer of the Board. Please return the executed original to Public Works and retain the duplicate for your files.

One adopted copy of this letter is requested.

Respectfully submitted,

DONALD L. WOLFE
Director of Public Works

CW:in
P6:BLRIO450ETC.DOC

Enc.

cc: Auditor-Controller (Accounting Division - Asset Management)
Chief Administrative Office
County Counsel

Interstate 710/Firestone Boulevard Improvements

INITIAL STUDY/ ENVIRONMENTAL ASSESSMENT

Prepared for:

California Department of Transportation

and

City of South Gate

September 13, 1996

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

SCH No. 96101004
07-LA-710-29.6

NEGATIVE DECLARATION (CEQA)
Pursuant to: Division 13, Public Resources Code

Description

The State of California Department of Transportation (Caltrans), in coordination with the City of South Gate, proposes to reconstruct the I-710/Firestone Boulevard interchange to alleviate existing and future traffic congestion, improve motorists' safety, and provide greater access into the surrounding developing areas in South Gate and Downey. The proposed project involves reconstruction of the existing cloverleaf interchange as a partial cloverleaf interchange with traffic signals at the off-ramps, and replacement of the Firestone Boulevard Overcrossing with a wider overcrossing accommodating six through travel lanes and two dedicated ramp lanes. The project is in an area of industrial and commercial redevelopment.

Determination

An Initial Study/Environmental Assessment has been prepared by the California Department of Transportation. On the basis of this study it is determined that the proposed action will not have a significant effect upon the environment for the following reasons:

1. No significant adverse effect will occur on existing transportation facilities or existing vehicle circulation patterns as a result of this project.

2. There would be no effect on topography, exposure to seismic activity, or erosion as a result of this project.

3. There would be no significant adverse effect on noise, air quality, energy usage, or water quality as a result of this project.

4. The project would have no effect on archaeological, cultural, parks, scenic or historical resources.

5. The project would not significantly impact or change wetlands vegetation or agricultural use.

6. There would be no effect on businesses, residences, schools, public facilities, neighborhoods, employment, or the area economy.

7. The proposed project would not have growth-inducing effects, nor would it alter population characteristics.

3-27-97

RAJA MITWASI
Chief, Division of Planning
Caltrans, District 7

Date

FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT

FOR

Long Beach Freeway (Interstate 710)/
Firestone Boulevard Improvements
South Gate, California

The Federal Highway Administration (FHWA) has determined that this project will not have any significant impact on the human environment. This finding of "no significant impact" is based on the attached Environmental Assessment, which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed project. It provides sufficient evidence and analysis for determining that an environmental impact statement is not required.

for DAVE DENSMORE
Division Administrator
Federal Highway Administration

9/1/97
Date

LONG BEACH FREEWAY (INTERSTATE 710)/ FIRESTONE BOULEVARD IMPROVEMENTS

07-LA-710-29.6

INITIAL STUDY/ ENVIRONMENTAL ASSESSMENT

State of California
Department of Transportation

Pursuant to: 42 U.S.C. 4332(2)©

Ronald Kosinski
for RAJA MITWASI
Chief, Division of Planning
Caltrans, District 7

Sept 11, '96
Date

DAVID H. DENSMORE
Division Administrator
Federal Highway Administration

SEPT 13, 1996
Date

TABLE OF CONTENTS

Section — Page

APPENDICES

LIST OF FIGURES

LIST OF TABLES

I. NEED FOR TRANSPORTATION IMPROVEMENTS

A. INTRODUCTION

Interstate 710 (I-710) serves as a major interregional and intraregional commuting and shipping corridor through an urbanized area from Long Beach to Pasadena. As seen in Figure 1, Regional Location, intersecting highways within Los Angeles County include Interstate 405 (I-405), State Route 91 (SR-91), Interstate 105 (I-105), Interstate 5 (I-5), State Route 60 (SR-60), and Interstate 10 (I-10). Currently, peak period traffic flow along I-710 is operationally deficient through many sections due to access and capacity limitations. This causes congestion and backup at several ramps, resulting in substantial delay for commuters.

Firestone Boulevard, formerly State Route 42, begins to the west as Manchester Avenue in Playa Del Rey, then continues eastward, intersecting with the San Diego (I-405) and Harbor (I-110) freeways. As it crosses Central Avenue in west Walnut Park, SR-42 becomes Firestone Boulevard, continuing eastward across I-710 in South Gate, and ending as a major highway at Rosecrans Avenue and I-5. The route serves as a parallel route to the recently completed Century Freeway, Interstate 105.

The I-710/Firestone Boulevard interchange (see Figure 2, Project Vicinity) is an important transportation facility serving the Cities of South Gate and Downey. The City of South Gate, in coordination with the State of California Department of Transportation (Caltrans), proposes to reconstruct the I-710/Firestone Boulevard interchange to alleviate existing and future traffic congestion, improve motorists' safety, and provide greater access into the surrounding developing areas in South Gate and Downey. Existing p.m. peak hour ADT (average daily traffic) volumes are shown in Table 1. The proposed project involves reconstruction of the existing cloverleaf interchange as a partial cloverleaf interchange with traffic signals at the off-ramps, and replaces the Firestone Boulevard Overcrossing with a wider overcrossing accommodating six through travel lanes and two dedicated on-ramp lanes. The proposed project is in an area of industrial and commercial development.

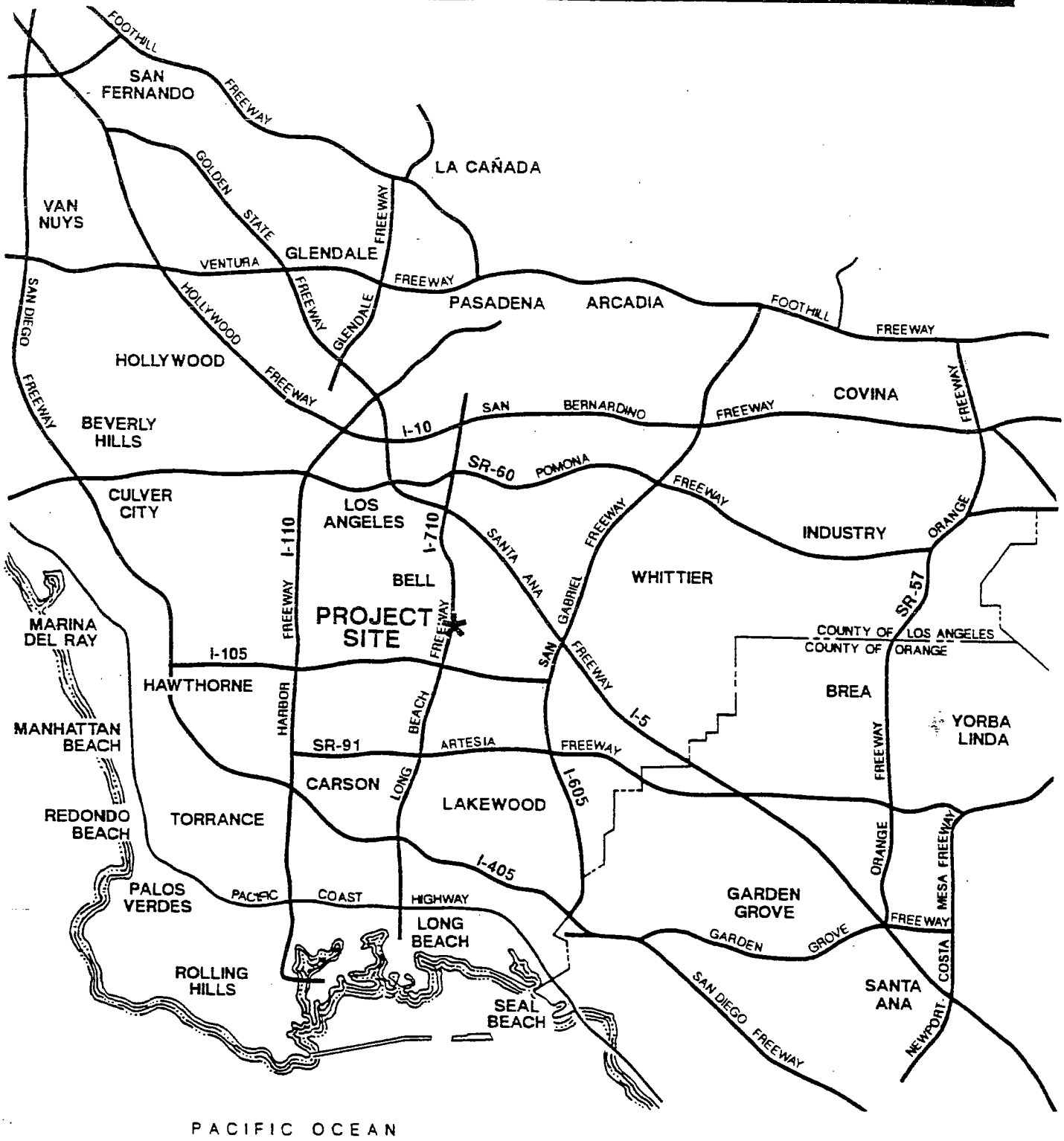
B. OPERATIONAL DEFICIENCIES

There are several deficient operations within the existing interchange that will be further negatively impacted by expected increased traffic volumes due to redevelopment plans in the Cities of South Gate and Downey. The following describes these existing deficient operations.

Firestone Boulevard

Large traffic volumes, limited capacity, and short weaving distances on Firestone Boulevard between the I-710 on- and off-ramps make weaving difficult for traffic exiting and entering I-710. The weaving traffic becomes a "bottleneck" to peak-hour through traffic, especially for westbound Firestone Boulevard traffic. Additionally, the Los Angeles River bridge (west of the interchange) and the Rio Hondo Channel bridge (east of the interchange) have narrow cross-sections, accommodating three eastbound lanes but only two westbound lanes.

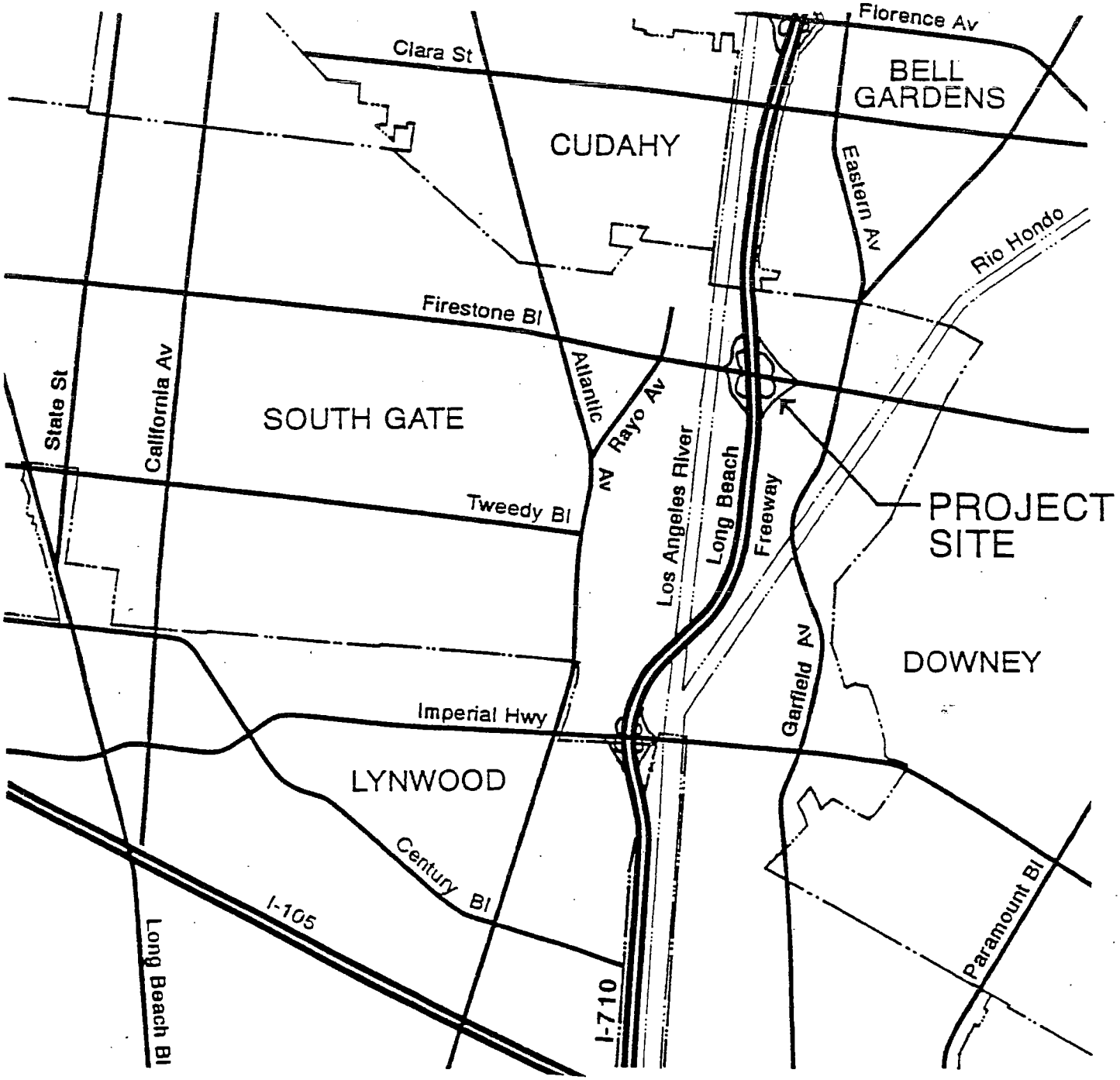
REGIONAL LOCATION



THE PLANNING CENTER

I-710/Firestone Boulevard Improvements
Figure 1

VICINITY MAP



THE PLANNING CENTER

I-710/Firestone Boulevard Improvements
Figure 2

Northbound I-710 Direct Off-ramp

The northbound I-710 direct off-ramp terminates on Firestone Boulevard at a short distance (120 meters) from Garfield Avenue. Off-ramp vehicles turning left at Garfield Avenue must cross three lanes of Firestone Boulevard traffic within this short distance to enter the left-turn pocket at Garfield. Some motorists choose to wait for a gap in through traffic to make this movement, causing off-ramp traffic to stack behind the waiting motorist. Numerous trucks also perform this movement, heading for the ARCO tank farm on Garfield Avenue just north of Firestone Boulevard. These trucks cannot always complete the move, leaving the rear of the truck blocking through traffic on Firestone Boulevard.

Southbound I-710 Direct Off-ramp

The southbound I-710 to westbound Firestone Boulevard off-ramp currently stacks vehicles throughout the day due to the stop sign control and the limited capacity on westbound Firestone Boulevard. With only two lanes for westbound through traffic, and no dedicated right-turn lane for off-ramp traffic to turn into to, motorists must wait for gaps in the traffic flow. According to a recent transyt analysis conducted by Austin-Foust Associates (January 1996), motorists on the off-ramp experience an average peak-period delay of 4.0 minutes. To avoid this delay, many motorists choose an alternative, circuitous route of three loop ramps within the interchange, exacerbating poor weaving operations as discussed above.

Loop Ramps

The existing loop ramps have awkward geometries that do not meet Caltrans current design standards.

Firestone Boulevard/Garfield Avenue

The Firestone Boulevard/Garfield Avenue intersection has insufficient capacity to carry the peak demand volumes, causing substantial delays. During peak hours the eastbound queues can extend to the northbound I-710 direct off-ramp, further deteriorating the off-ramp operations discussed above.

Northbound Rayo Avenue

Northbound Rayo Avenue has a large right-turn volume onto eastbound Firestone Boulevard. However, heavy eastbound traffic and limited capacity on Firestone Boulevard makes it difficult for motorists to turn right except when protected by the traffic signal. The queues generated on Rayo Avenue between signal cycles require a disproportionate amount of "green" time for this right-turn traffic to clear, causing increased delay on Firestone Boulevard.

C. ACCIDENT ANALYSIS

A review of accident history for the existing interchange was conducted by Austin-Foust Associates using data from Caltrans' Traffic Accident Surveillance and Analysis System (TASAS) for a 39-month period from October 1991 through December 1994. TASAS records indicate that the southbound I-710 off-ramp to westbound Firestone Boulevard experienced an accident rate of 2.11 accidents per million vehicles, over five (5) times that normally encountered for such a ramp. This high accident rate might be associated with long queues that occur throughout the day as southbound off-ramp traffic is delayed making the right-turn from the off-ramp onto westbound Firestone Boulevard, as previously discussed. Additionally, the northbound I-710 on-ramp from westbound Firestone Boulevard experienced an accident rate of 0.81 accidents per million vehicles, nearly twice that normally encountered for such a ramp.

D. FUTURE TRAFFIC ANALYSIS

Because operation of the existing interchange is deficient and traffic growth is expected due to redevelopment plans and area growth in the Cities of Downey and South Gate, modification of the interchange is necessary. Improvements to the I-710/Firestone Boulevard interchange have been identified in the 1993-99 Regional Transportation Improvement Program (RTIP).

Under Post-2015 conditions without interchange improvements, motorists using the southbound I-710 off-ramp to westbound Firestone Boulevard would experience average p.m. peak hour delays of 241 seconds/vehicle (4.0 minutes); although the intersection as a whole operates within an acceptable average delay of 12.8 seconds/vehicle. The southbound I-710 off-ramp to westbound Firestone Boulevard currenly experiences long queues throughout the day as southbound off-ramp traffic is delayed making the righ-turn from the off-ramp onto westbound Firestone Boulevard. Under Post-2015 conditions without interchange improvements, motorists using the northbound I-710 off-ramp to eastbound Firestone Boulevard would experience average p.m. peak hour delays of 18.9 seconds/vehicle; and an overall interchange delay of 3.0 seconds/vehicle. The proposed interchange reconstruction would result in an average intersection delay of 7.0 seconds/vehicle at the southbound I-710 ramps and an average intersection delay of 5.5 seconds/vehicle at the northbound ramps.

Future p.m. peak hour ADT volumes with the proposed improvements are shown in Table 1. Post-2015 volumes were forecasted by a growth factoring technique based on historical growth patterns. During the 22-year period from 1969 to 1991, traffic growth on Firestone Boulevard in the vicinity of the I-710 Freeway averaged an increase of 1.95 percent per year. A ten percent reduction in traffic was anticipated along Firestone Boulevard near the I-710 interchange due to the completion of the I-105 Freeway. These growth factors were combined with the current traffic count data at the interchange to produce Post-2015 ADT and peak hour volumes.

TABLE 1 EXISTING AND POST-2015 P.M. PEAK HOUR ADT		
Intersection	Existing	Post-2015
	PM Peak Hour ADT	PM Peak Hour Design ADT
NB I-710 to EB Firestone Off-ramp	7,200	9,600
NB I-710 to WB Firestone Off-ramp	9,100	12,100
WB Firestone to NB I-710 On-ramp	8,300	14,500
EB Firestone to NB I-710 On-ramp	11,500	13,900
SB I-710 to WB Firestone Off-ramp	8,000	10,300
SB I-710 to EB Firestone Off-ramp	9,100	12,100
WB Firestone to SB I-710 On-ramp	7,700	8,800
EB Firestone to SB I-710 On-ramp	9,100	12,100

II. PROPOSED PROJECT AND ALTERNATIVES CONSIDERED

Caltrans, in coordination with the City of South Gate, proposes to improve the existing I-710/Firestone Boulevard interchange to alleviate existing and future traffic congestion. Four alternatives were considered in the Project Study Report. After review of the alternatives, one was selected for further consideration within this Initial Study/Environmental Assessment, and the remaining three were withdrawn from further consideration. This section discusses in detail the alternative receiving full evaluation, and also briefly describes those alternatives which were withdrawn from consideration.

A. ALTERNATIVE B (PROPOSED PROJECT/PREFERRED ALTERNATIVE)

Alternative B, illustrated in Figures 3 and 4, was determined to be the Preferred Alternative based on engineering constraints, project cost/benefit ratio, and potential environmental impacts. Following is a description of Alternative B, hereafter referred to as the "proposed project."

Ramps

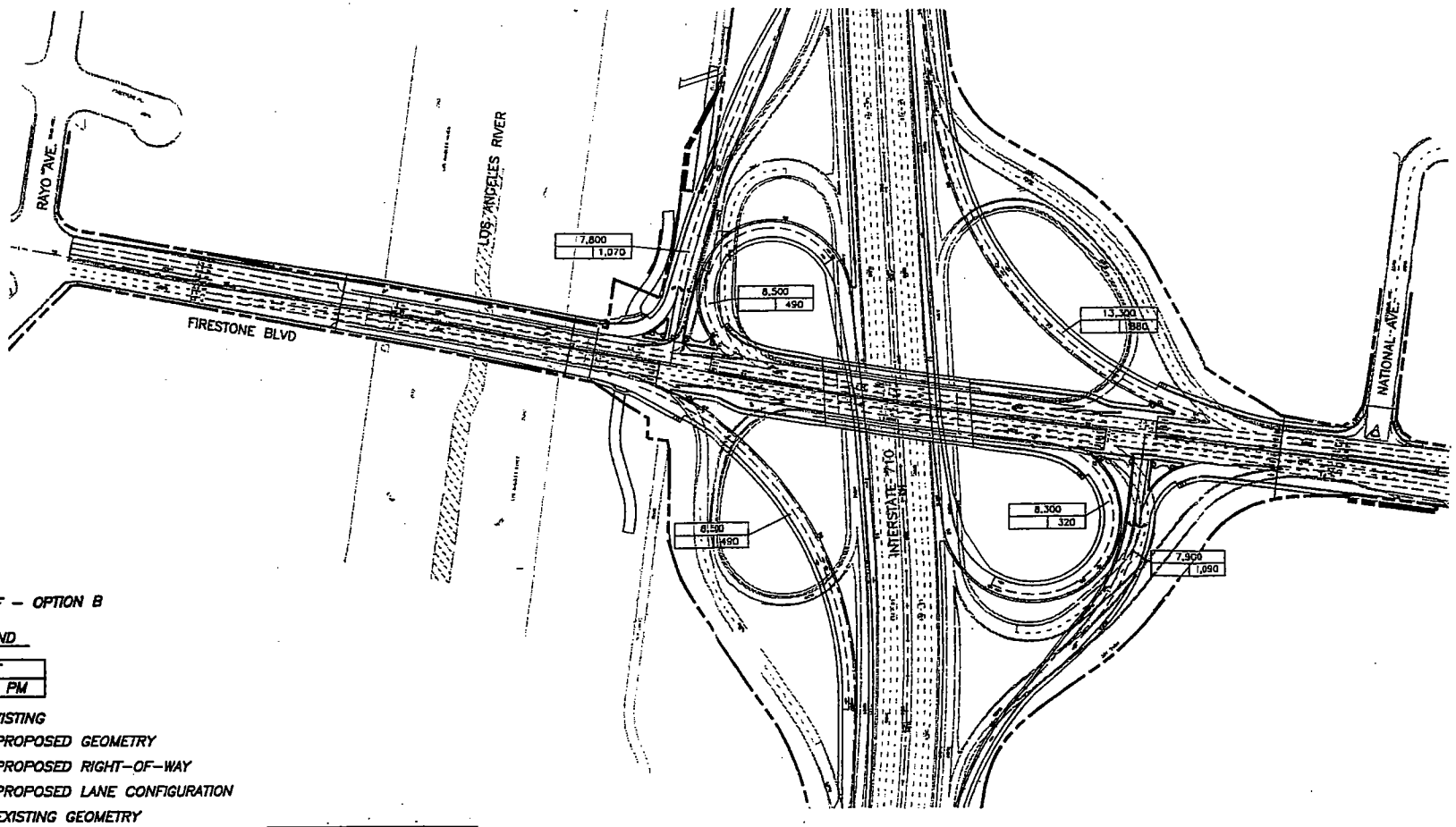
The proposed project would modify the existing full cloverleaf interchange to a partial cloverleaf interchange by removing the northbound and southbound loop off-ramps and the existing collector-distributor roads. The southbound loop on-ramp would be constructed with a smaller radius than the northbound loop on-ramp to avoid the LADWP tower just west of the ramp. A retaining wall would be required adjacent to the southbound direct off-ramp to avoid the tower. Both the northbound and southbound loop on-ramps would be located with geometrics so as not to preclude a future mainline HOV lane addition.

Overcrossing

The existing four-span, closed-end abutment Firestone Boulevard overcrossing would be reconstructed as a two-span open-end abutment structure, providing three through lanes and a right-turn lane in each direction. The reconstructed overcrossing would accommodate future I-710 widening for proposed HOV projects under study by Caltrans.

Right-of-Way

A small amount of right-of-way acquisition would be necessary near the southbound off-ramp terminus lane with Firestone Boulevard for the enclosure of the existing channel. This right-of way is currently owned by the Los Angeles Department of Water and Power (LADWP).



PARTIAL CLOVERLEAF – OPTION B

LEGEND

ADT	
AM	PM

(E) – EXISTING

PROPOSED GEOMETRY

PROPOSED RIGHT–OF–WAY

PROPOSED LANE CONFIGURATION

EXISTING GEOMETRY

EXISTING RIGHT–OF–WAY

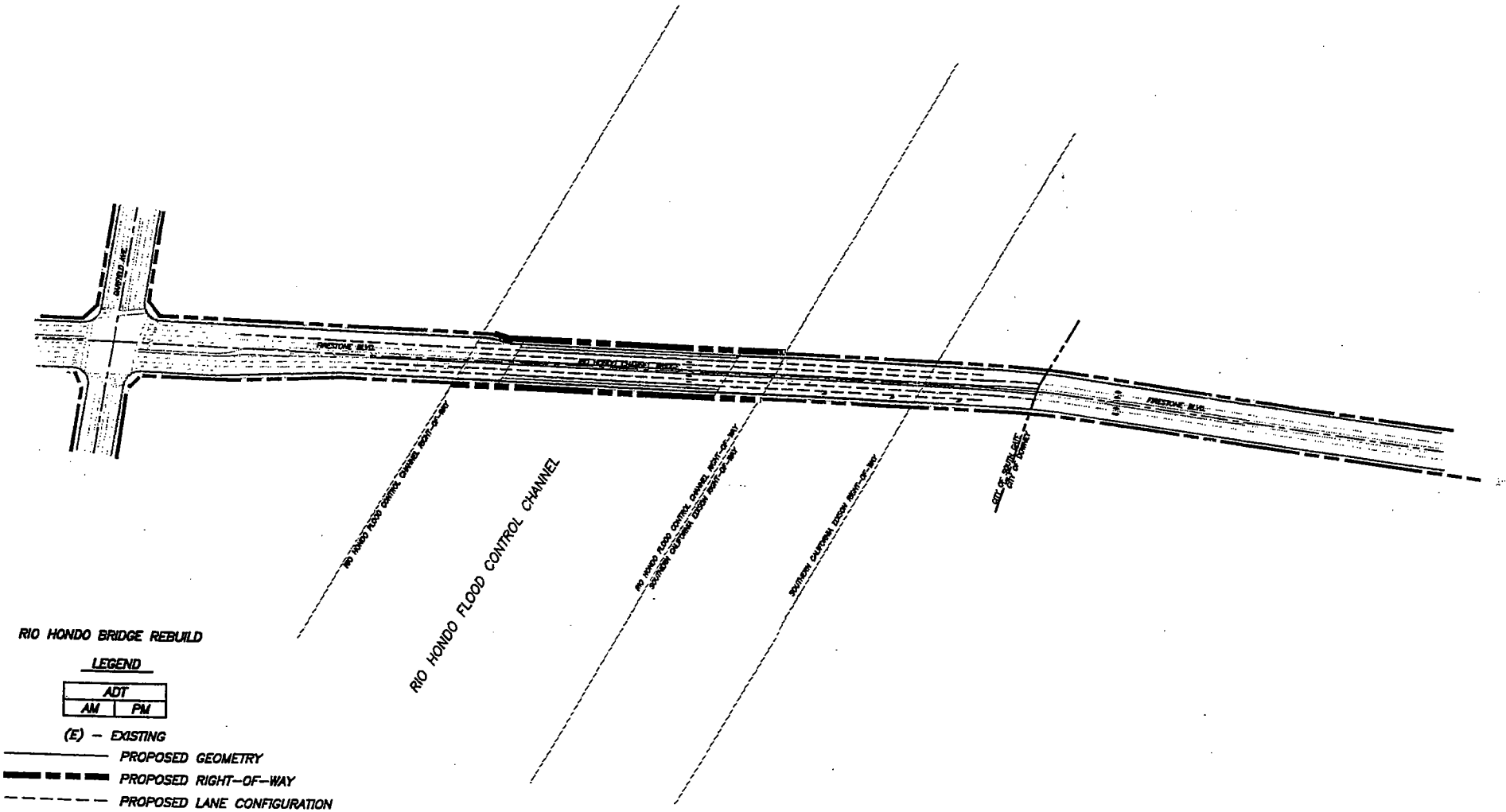
EXISTING LANE CONFIGURATION

0 60M 120M

SOURCE: IWA ENGINEERS

THE PLANNING CENTER

I-710/Firestone Boulevard Improvements
Figure 3



RIO HONDO BRIDGE REBUILD

LEGEND

ADT	
AM	PM

(E) – EXISTING

PROPOSED GEOMETRY

PROPOSED RIGHT–OF–WAY

PROPOSED LANE CONFIGURATION

EXISTING GEOMETRY

EXISTING RIGHT–OF–WAY

EXISTING LANE CONFIGURATION

0 60M 120M

SOURCE: IWA ENGINEERS

THE PLANNING CENTER

I-710/Firestone Boulevard Improvements
Figure 4

Firestone Boulevard

The northbound off-ramp traffic desiring to make the left turn from Firestone Boulevard to northbound Garfield Avenue would be given approximately 60 meters of additional distance over the existing configuration for weaving. Two new signalized intersections would be added at the terminus of the northbound and southbound off-ramps. The Los Angeles River Bridge would be widened to provide a dedicated lane for westbound traffic from the southbound off-ramp and an additional through lane for westbound traffic.

South Gate Underpass

The existing South Gate underpass crossing I-710 north of Firestone Boulevard would not impacted by the proposed project. The northbound direct on-ramp and the southbound direct off-ramp geometry would fit within the abutments of the existing underpass through the use of non-standard design features.

Flood Control Channels

LACFCD Channel

A length of the Los Angeles County Flood Control District (LACFCD) channel adjacent to the southbound direct off-ramp, which is currently an open rectangular channel, would be enclosed by lengthening the existing box. The channel has been fully improved in the past, so the proposed action should not be subject to state or federal laws regulating alteration of soft-bottomed streambeds.

Rio Hondo Channel

The Rio Hondo Channel bridge would be widened to provide three through lanes in each direction on Firestone Boulevard. The channel has been fully improved in the past, so the proposed action should not be subject to state or federal laws regulating alteration of soft-bottomed streambeds.

Project Phasing/Construction Costs

The construction cost for the proposed project is estimated at $28.5 million. The improvements have been separated into four construction phases. The following identifies each phase and its relative cost.

Phase 1:	Reconfiguration and signalization of the southbound ramps	$8.1 million
Phase 2:	Reconfiguration and signalization of the northbound ramps	$7.3 million
Phase 3:	Widening of the Rio Hondo Channel Bridge	$5.0 million
Phase 4:	Final interchange configuration	$13.1 million

B. ALTERNATIVES WITHDRAWN FROM CONSIDERATION

Several alternatives intended to address the identified transportation problems within the I-710/Firestone Boulevard interchange were investigated in the Project Study Report. As engineering studies progressed, it became apparent that certain alternatives would not adequately address the identified circulation problems, would be prohibitively expensive, and/or would involve problematic environmental issues. Consequently, these alternatives were not pursued further. The alternatives withdrawn from further consideration are briefly discussed below.

No-Build Alternative

This alternative represents "no action," and would not provide any solution to congestion, delay, and accidents on the existing facility. The addition of traffic at a rate of nearly 2 percent per year would compound existing operational deficiencies and further increase congestion, delays, and accident rates, and result in increased automotive emissions.

Additionally, the No-Build Alternative would be incompatible with development plans in the Cities of South Gate and Downey. These development plans rely on the improved traffic circulation and access that the proposed project provides. Consequently, this alternative has been withdrawn from further consideration.

Alternative A - Full Cloverleaf

Alternative A, with construction costs of $35 million, would replace the existing cloverleaf with a full cloverleaf interchange. The Firestone Boulevard overcrossing would be reconstructed as a four-span, open-end abutment structure, with a third westbound through lane. The Los Angeles River bridge would be widened to provide a dedicated lane for southbound off-ramp traffic and a third westbound through lane on Firestone Boulevard. The undesirable geometry of the existing loop ramps would be replaced with circular loops with standard cross-sections which provide lane widening for trucks.

The circular loop ramps within Alternative A would reduce the already inadequate weaving distances between loop ramps on the freeway collector-distributor road. Operation of the full cloverleaf would deteriorate as traffic volumes increased, increasing congestion, delays, accident rates, and automotive emissions. For these reasons, and the additional cost compared with the Preferred Alternative, Alternative A has been withdrawn from further consideration.

Alternative C - Urban Interchange

Alternative C, the most costly alternative with construction costs of $39 million, would replace the existing cloverleaf with an urban interchange. The loop ramps and collector-distributor road would be eliminated and the direct ramps would be reconstructed to meet at a signalized intersection in the midpoint of Firestone Boulevard and I-710. The Firestone Boulevard overcrossing would be reconstructed as a two-span partial open-end abutment structure, with a dual left-turn pocket and three through lanes in each direction.

Compared with the other alternatives, Alternative C would require the greatest widening of the Los Angeles River bridge to accommodate a taper for the dual left-turn pocket at the overcrossing and three through lanes and an acceleration lane in the westbound direction. Additional right-of-way would be required near the merge of the on-ramps with the freeway. Right-of-way needed for the northbound on-ramp would be in an area of known groundwater contamination.

III. ENVIRONMENTAL SETTING

The study area is located in a highly urbanized area along I-710, in the northeast portion of the City of South Gate. The project site is located within the City's South Gate Triangle Planning Area. The majority of the Planning Area is designated as mixed use commercial/industrial and the City's plans for the area reflect this area's strong potential for retail development.

Photographs of the project site and adjacent uses are provided in Figures 6 and 7. Figure 5 provides the location and view direction of these photographs.

The following describes the environmental setting in the project vicinity.

A. GEOLOGY AND HYDROLOGY

Regionally, the site is located in the Central Block of the Los Angeles Basin, within the south central section of the Traverse Range geomorphic province of California. The project area is underlain by unconsolidated silty clay, sandy silt and sand that represent Holocene and Upper Pleistocene floodplain deposits derived from the nearby Los Angeles and Rio Hondo rivers.

Subsurface soils observed during the Site Investigation conducted by Agra Earth & Environmental, Inc. indicated the presence of Quaternary alluvial deposits consisting of unconsolidated silty clay, silt and silty sand in the native materials.

The elevation of land surface in the vicinity of the interchange is approximately 32 meters (105 feet) above sea level. Drainage is to the Los Angeles River located just west of I-710. The estimated depth to ground water beneath the project area is 24 meters (80 feet) below ground surface. This estimate is based on a review of the Coastal Plain map of ground water contours for Fall 1992, prepared by the Los Angeles County Department of Public Works. Ground water contours on this map indicate that ground water flow is toward the west. A more shallow zone of ground water exists at a depth of approximately 15 meters (50 feet) beneath the site, and ground water flow is generally to the south at a gradient of 0.004 feet/foot. These ground water data were obtained for the ARCO Vinvale facility from wells installed to monitor groundwater in the interchange area.

B. HAZARDOUS MATERIALS

A site investigation (SI) report was prepared for the proposed project to determine the potential for encountering subsurface hazardous wastes during project construction (see Appendix C). This study was undertaken in follow up to an initial site assessment (ISA) which identified potential hazardous waste concerns.

The ISA identified three sites adjacent to the proposed project boundaries that have known or suspected soil and/or ground water contamination as a result of spills or other releases of regulated materials. These sites are each located north of Firestone Boulevard and east of I-710. The ARCO Vinvale facility was identified due to past fuel releases that have caused soil and groundwater contamination within and beyond the facility boundaries. The ARCO gasoline service station No.

5110 is identified as a leaking underground storage tank (LUST) site where groundwater impact is suspected. Finally, the International Window Corporation site is also identified in the LUST database. Substances released and their extent are currently unknown but are being investigated for this site.

Based upon the sites identified in the ISA, a field investigation was undertaken to assess subsurface conditions at selected locations within the I-710/Firestone Boulevard interchange and along the north side of Firestone Boulevard east of the I-710 interchange. Testing at the site included 14 soil borings and five additional lead-only sampling locations. Borings were made to the maximum depth of anticipated grading activity for the project. Ground water was not encountered in these borings.

Laboratory analyses of samples from the soil borings within the project right-of-way indicated the presence of petroleum hydrocarbons and benzene, toluene, ethylbenzene and xylenes (collective referred to as "BTEX") in soil located east and west of I-710 and north of Firestone Boulevard, primarily near the ARCO Vinvale western property boundary. The relatively high concentrations of these substances in some of the samples analyzed indicate that subsurface materials within the project area may be considered as hazardous. Lead concentrations were found to be at acceptable levels.

C. TRAFFIC/CIRCULATION

The existing road network and traffic conditions are described in Section 1, Need for Transportation Improvements.

D. NOISE

The predominant noise source in the study area is I-710 mainline traffic. To a lesser degree, freeway interchange and surface street traffic and manufacturing activities at nearby industrial centers also contribute to ambient noise levels. Additionally, the study area is exposed to single-event noise disturbances from operations on the Union Pacific Railroad, located west of I-710, which carries an average of one train daily.

E. AIR QUALITY

The project site is within the South Coast Air Basin (Basin), which includes Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties. Air quality conditions in the Basin are under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Appendix B provides supporting materials for this section, including a description of air pollutant constituents, climate and meteorology, and air quality management efforts.

Local Air Quality

The project site is located within Source Receptor Area (SRA) 12, one of the thirty areas under the jurisdiction of the SCAQMD. The communities within an SRA are expected to have similar

climatology and, subsequently, similar ambient air pollutant concentrations. The Lynwood monitoring station in SRA 12 collects data representative of the study area.

The Lynwood station monitors six of the seven criteria pollutants: carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, lead, and sulfate.[1] Suspended particulates are not monitored at this station, but could be monitored in the future if local levels of these pollutants become a concern to the SCAQMD or the ARB.

Air quality trends developed at the Lynwood air quality monitoring station between 1992 and 1994 are discussed below. From the ambient air quality data presented in Table 2, it can be seen that nitrogen dioxide, sulfur dioxide, lead and sulfate levels have not equaled or exceeded the relevant state and federal standards during this 3-year period, while carbon monoxide and ozone have exceeded the state and/or federal standards.

Of all of the pollutants monitored, carbon monoxide equaled or exceeded the state and federal standards most often. A maximum 8-hour concentration of 18.8 ppm, over twice the state standard, was measured in 1992.

F. BIOLOGY

The Los Angeles River and Rio Hondo Channel are both concrete channels with grouted rip-rap sides from their confluence (approximately 2.4 kilometers south of the project site) to at least several hundred feet north of the project site. No birds or other wildlife were observed during a field visit of the site.

Mr. Kimball L. Garrett, manager of the Natural History Museum of Los Angeles County's vertebrate collection, was contacted to confirm the results of the field visit. Mr. Garrett is the leading authority on biological resources associated with the Los Angeles River and its tributaries, having conducted extensive biological studies on the river and having edited The Biota of the Los Angeles River, an Overview of the History and Present Plant and Animal Life of the Los Angeles River Drainage.[2]

---

1 Source: South Coast Air Quality Management District, Air Quality Tables, 1992, 1993 and 1994.

2 Report, dated March 1993, prepared for the California Department of Fish and Game, by the History Museum of Los Angeles County Foundation.

TABLE 2
AMBIENT AIR QUALITY
LYNWOOD AIR MONITORING STATION

	CARBON MONOXIDE				*OZONE*		*NITROGEN DIOXIDE*	
	Maximum 1-Hour Conc. (PPM)	Number of Days Exceeded	Maximum 8-Hour Conc. (PPM)	Number of Days Exceeded	Maximum 1-Hour Conc. (PPM)	Number of Days Exceeded	Maximum 1-Hour Conc. (PPM)	Number of Days Exceeded
State Standards	> 20 ppm/1-Hour		≥ 9.1 ppm/8-Hour		> .09 ppm/1-Hour		> .25 ppm/1-Hour	
1994	25	1	18.1	26	.12	2	.20	0
1993	21	1	14.6	29	.12	7	.23	0
1992	28	5	18.8	36	.17	17	.25	0
MAXIMUM	28		18.8		.17		.25	
% EXCEEDED		<1%		8%		2%		0
Federal Standards	> 35 ppm/1-Hour		≥ 9.5 ppm/8-Hour		> .12 ppm/1-Hour		No Federal Standard	
1994	25	0	18.1	22	.12	0	NA	NA
1993	21	0	14.6	22	.12	0	NA	NA
1992	28	0	18.8	31	.17	4	NA	NA
MAXIMUM	28		18.8		.17		NA	
% EXCEEDED		0%		7%		<1%		NA

	SULFUR DIOXIDE		*LEAD*		*SULFATE*	
	Maximum 1-Hour Conc. (PPM)	Number of Days Exceeded	Maximum Quarter/ Month Conc. (ug/m^3)	Quarters/ Months Exceeded	Maximum 24-Hour Conc. (ug/m^3)	Number of Samples Exceeded
State Standards	≥ .05 ppm/24-Hour		≥ 1.5 ug/m^3/Monthly Avg.		≥ 25 ug/m^3/24-Hour	
1994	.02	0	.09	0	23.1	0
1993	.03	0	.08	0	13.7	0
1992	.06	0	.11	0	18.7	0
MAXIMUM	.06		.11		23.1	
% EXCEEDED		0		0%		0%
Federal Standards	> .14 ppm/24-Hour		> 1.5 ug/m^3/Quarterly Avg.		No Federal Standard	
1994	.02	0	.07	0	NA	NA
1993	.03	0	.06	0	NA	NA
1992	.06	0	.08	0	NA	NA
MAXIMUM	.06		.08		NA	
% EXCEEDED		0		0%		NA

NA = Not Applicable

IV. ENVIRONMENTAL EVALUATION

A. REFERENCE DOCUMENTS

The following documents were used in the both determining the environmental significance of impacts, as well as in the analysis of the impacts that follows the checklist.

1. AGRA Earth & Environmental, Inc., Draft Site Investigation (SI) Report, Proposed Improvements to the I-710/Firestone Boulevard Interchange, South Gate, California, Revised November 15, 1995.

2. M & T Agra, Initial Site Assessment, Proposed Improvements to the I-710/Firestone Boulevard Interchange, South Gate, California, May 18, 1993.

3. Austin-Foust Associates, Inc., Draft I-710 Freeway NB/SB Ramps & Firestone Boulevard Signalization Improvements, Transyt Analysis, February 1996.

4. Austin-Foust Associates, Inc., Draft I-710 Freeway NB/SB Ramps & Firestone Boulevard Signalization Improvements, Transyt Analysis, October 5, 1995.

5. Austin-Foust Associates, Inc., Draft I-710 Freeway NB/SB Ramps & Firestone Boulevard Signalization Improvements, Transyt Analysis, July 12, 1995.

6. Caltrans. Environmental Handbook Manual of Instructions.

7. Robert A. Hamilton, Report on Biological Issues - Firestone Environmental Assessment, September 20, 1995.

8. IWA Engineers, Summary Report City of South Gate I-710/Firestone Boulevard Improvements, November 1991.

9. Leighton & Associates with Sedway Cooke Associates, Technical Appendix to the Safety Element of the Los Angeles County General Plan: Hazard Reduction in Los Angeles County, Vol. 2, Plates 1-8, January 1990.

B. CHECKLIST/INTRODUCTION

The "Environmental Significance Checklist" reproduced in Table 3 was used to focus on the environmental impacts most likely to occur due to implementation of the preferred alternative. This checklist enables the evaluation of physical, biological, social, and economic factors which may be affected by the proposed freeway interchange improvements. A "no" answer on the checklist documents a "no impact" determination. A "yes" answer on the checklist documents an impact.

Studies performed in connection with this Initial Study/Environmental Assessment indicate all impacts of the proposed project will not be significant. A discussion of the potential impacts and the proposed mitigation measures is provided following Table 3.

TABLE 3
ENVIRONMENTAL SIGNIFICANCE CHECKLIST

	YES or NO	IF YES, IS IT SIGNIFICANT? YES or NO
PHYSICAL. Will the proposal (either directly or indirectly):		
1. Appreciably change the topography or ground surface relief features?	yes	no
2. Destroy, cover, or modify any unique geologic or physical features?	no	
3. Result in unstable earth surfaces or increase the exposure of people or property to geologic or seismic hazards?	no	
4. Result in or be affected by soil erosion or siltation (whether by water or wind)?	yes	no
5. Result in the increased use of fuel or energy in large amounts or in a wasteful manner?	no	
6. Result in an increase in the rate of use of any resource?	no	
7. Result in the substantial depletion of any nonrenewable natural resource?	no	
8. Violate any published Federal, State, or local standards pertaining to hazardous waste, solid waste or litter control?	no	
9. Modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?	yes	no
10. Encroach upon a floodplain or result in or be affected by floodwaters or tidal waves?	yes	no
11. Adversely affect the quantity or quality of surface water, groundwater, or public water supply?	no	
12. Result in the use of water in large amounts or in a wasteful manner?	no	
13. Affect wetlands or riparian vegetation?	no	
14. Violate or be inconsistent with Federal, State, or local water quality standards?	no	
15. Result in changes in air movement, moisture, or temperature, or any climatic conditions?	no	
16. Result in an increase in air pollutant emissions, adverse effects on or deterioration of ambient air quality?	yes	no
17. Result in the creation of objectionable odors?	no	
18. Violate or be inconsistent with Federal, State, or local air standards or control plans?	no	
19. Result in an increase in noise levels or vibration for adjoining areas?	yes	no
20. Result in any Federal, State, or local noise criteria being equal or exceeded?	yes	no
21. Produce new light, glare, or shadows?	no	

	YES or NO	IF YES, IS IT SIGNIFICANT? YES or NO
BIOLOGICAL. Will the proposal result in (either directly or indirectly):		
22. Changes in the diversity of species or number of any species of plants (including trees, shrubs, grass, microflora, and aquatic plants?)	no	
23. Reduction of the numbers of or encroachment upon the critical habitat of any unique, rare or endangered species of plants?	no	
24. Introduction of new species of plants into an area, or result in a barrier to the normal replenishment of existing species?	no	
25. Reduction in acreage of any agricultural crop or commercial timber stand, or affect prime, unique, or other farmland of State or local importance?	no	
26. Removal or deterioration of existing fish or wildlife habitat?	no	
27. Change in the diversity of species, or number of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects or microfauna)?	no	
28. Reduction of the numbers of or encroachment upon the critical habitat of any unique, rare or endangered species of animals?	no	
29. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?	no	
SOCIAL AND ECONOMIC. Will the proposal (directly or indirectly):		
30. Cause disruption of orderly planned development?	no	
31. Be inconsistent with any elements of adopted community plans, policies or goals, the California Urban Strategy?	no	
32. Be inconsistent with a Coastal Zone Management Plan?	no	
33. Affect the location, distribution, density, or growth rate of the human population of an area?	no	
34. Affect life-styles, or neighborhood character or stability?	no	
35. Affect minority, elderly, handicapped, transit-dependent, or other specific interest group?	no	
36. Divide or disrupt an established community?	no	
37. Affect existing housing, require the acquisition of residential improvements or the displacement of people or create a demand for additional housing?	no	
38. Affect employment, industry or commerce, or require the displacement of business or farms?	no	
39. Affect property values or the local tax base?	no	
40. Affect any community facilities (including medical, educational, scientific, recreational, or religious institutions, ceremonial sites or sacred shrines)?	no	
41. Affect public utilities, or police, fire, emergency or other public services?	yes	no
42. Have substantial impact on existing transportation systems or alter present patterns of circulation or movement of people and/or goods?	no	
43. Generate additional traffic?	no	
44. Affect or be affected by existing parking facilities or result in demand of new parking?	no	
45. Involve a substantial risk of an explosion or the release of hazardous substances in the event of an accident or otherwise adversely affect overall public safety?	no	
46. Result in alterations to waterborne, rail or air traffic?	no	
47. Support large commercial or residential development?	yes	no

	YES or NO	IF YES, IS IT SIGNIFICANT? YES or NO
48. Affect a significant archaeological or historical site, structure, object, or building?	no	
49. Affect wild or scenic rivers or natural landmarks?	no	
50. Affect any scenic resources or result in the obstruction of any scenic vista or view open to the public, or creation of an aesthetically offensive site open to public view?	no	
51. Result in substantial impacts associated with construction activities (e.g., noise, dust, temporary drainage, traffic detours and temporary access, etc.)?	yes	no
52. Result in the use of any publicly-owned land from a park, recreation area, or wildlife and waterfowl refuge?	no	

MANDATORY FINDINGS OF SIGNIFICANCE	YES or NO
53. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number of, restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	no
54. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts endure well into the future.)	no
55. Does the project have environmental effects which are individually limited, but cumulatively considerable? Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effect of other current projects, and the effects of probable future projects? It includes the effects of other projects which interact with this project and, together, are considerable.	no
56. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	no

C. TOPOGRAPHY (Checklist Question 1)

Although this is not a hillside area, the existing cloverleaf configuration includes fairly steep slopes. The slopes would be modified when the full cloverleaf is reconstructed as a partial cloverleaf and significant grading with potential to substantially alter topography or ground surface features would occur with this project. However, no unique geologic or physical features would be destroyed. No mitigation measures are necessary.

D. SEISMICITY (Checklist Question 3)

Demolition of the existing interchange structures and reconstruction of a new reconfigured interchange in its place would not create unstable earth surfaces or increase exposure of people or property to geologic or seismic hazards. The new interchange would be required to meet existing engineering standards for seismic safety, which are more stringent than the standards in effect at the time of construction of the existing structures. No mitigation measures are necessary.

E. SOIL EROSION (Checklist Question 4)

The proposed project would involve major demolition, grading and reconstruction. The cloverleaf configuration would be entirely demolished. The ramps would all be reconstructed. A retaining wall on the southbound off-ramp and a retaining wall on the northbound off-ramp may be needed. Soil erosion could occur during the construction period. Potential for erosion due to wind would be minimized by adherence to South Coast Air Quality Management District (SCAQMD) Rule 403, Fugitive Dust and other SCAQMD requirements to reduce dust at the construction site. Erosion due to water would be avoided by avoiding construction during the rainy season. No mitigation measures are necessary beyond those required by regulation and law.

F. ENERGY/NATURAL RESOURCES (Checklist Questions 5, 6, and 7)

The construction of this project would utilize some petroleum products, including diesel fuel. It is not expected that the amount of fuel consumed would be excessive or wasteful, particularly since the proposed roadway improvements would improve traffic flow and reduce overall fuel consumption compared with the potential for significant future traffic congestion if the project were not implemented. There would be some consumption of other resources, including nonrenewable resources, such as asphalt, sand and gravel, wood, and metals used in the construction process. The amount of materials used would not be substantial, as this project does not involve construction of a major new highway system. No mitigation measures are necessary.

G. HAZARDOUS WASTE (Checklist Question 8)

Refer to Appendix C, Draft Site Investigation Report, Proposed Improvements to the I-710/Firestone Boulevard Interchange (AGRA Earth & Environmental, November 1995), for a complete discussion of the hazardous waste impacts associated with the proposed project. Following is a summary of that report.

There are three sites adjacent to the proposed project boundaries which have known or suspected soil contamination and groundwater impacts resulting from spills or other releases of regulated materials. These sites, each located east of I-710 and north of Firestone Boulevard, are the ARCO Vinvale facility, ARCO service station No. 5110, and the International Window Corporation. The ARCO Vinvale facility operates wells to monitor groundwater in the study area.

Soil borings and sampling were conducted within the proposed right-of-way to verify the presence or absence of soil contamination. The site investigation identified that soil contamination is present within the project limits and, consequently, it should be anticipated that contaminated soil will be encountered during excavation or construction. Laboratory analyses of soil samples indicate the presence of hazardous levels of petroleum hydrocarbons and benzene, toluene, ethylbenzene, and xylenes (collectively referred to as "BTEX") in soil located east and west of I-710 and north of Firestone Boulevard, primarily near the ARCO Vinvale western property line. Lead concentrations, however, were found to be at acceptable levels.

Because soil contamination is present within the project limits, remedial action will be required to properly dispose of petroleum-contaminated soils encountered during project construction. Additionally, a site safety plan specific to the planned excavation and construction activities will be required for use by construction personnel and emergency response agencies. Implementation of the following s will keep hazardous waste impacts to a level that is less than significant.

Mitigation Measures

1. A Site Safety Plan shall be approved by the City of South Gate and Caltrans prior to initiation of construction activities.

2. Prior to initiation of construction activities, underground fuel pipelines within the project area shall be clearly delineated, and caution shall be used during construction activities in the vicinity of underground pipelines.

3. Prior to initiation of construction activities, ARCO representatives shall be contacted to obtain current information of the status of ground water monitoring wells which could be affected by project construction activities. Consideration shall be given to the potential impact of construction activities on the operation of ARCO's ground water remediation system.

4. During excavation and construction activities, visual observation and field monitoring of organic vapor concentrations shall be performed. If organic vapors are encountered in excess of South Coast Air Quality Management District standards, work shall be stopped in the contaminated areas. The contaminated areas shall be covered and evaluated. Remediation may be necessary before work in the area can resume.

5. Prior to initiation of construction activities, a supplemental subsurface investigation should be conducted within the alignment of the proposed southbound off-ramp where contaminated soils have been encountered, to determine where contamination exists within the construction impact zone. Analyses of soil samples should address total petroleum hydrocarbons, gasoline and diesel.

6. Remedial actions shall be undertaken to treat and/or dispose of petroleum-contaminated soils. Remedial actions shall be designed to protect human health and the environment and comply with Applicable or Relevant and Appropriate Requirements (ARARs).

H. CHANNEL MODIFICATION (Checklist Question 9)

The project would involve widening of the Los Angeles River and Rio Hondo Channel bridges and enclosing portions of another LACFCD channel located adjacent to the southbound on-ramp and off-ramp. The Los Angeles River and Rio Hondo Channel are concrete lined and possess little or no value for native wildlife species. Since the channels have been fully improved in the past, the proposed action should not be subject to state or federal laws regulating alteration of soft-bottomed streambeds. The project proponent may be required to obtain a 401 water quality certification, or

waiver of certification, from the California Regional Water Quality Control Board (RWQCB). No mitigation measures are necessary.

I. FLOODPLAIN (Checklist Question 10)

According to the Technical Appendix for the Safety Element of the Los Angeles County General Plan, the project site is not located in a floodplain and is not subject to inundation from tidal waves. No mitigation measures are necessary.

J. WATER QUALITY (Checklist Questions 11 and 14)

The reconstruction of the interchange and other improvements would involve significant soil disturbance. Stormwater runoff could occur that would be contaminated with Total Dissolved Solids (TDS), oil and grease and other contaminants. The discharge would ultimately flow into the Los Angeles River.

The proposed project could violate Federal water quality standards. The RWQCB is implementing the federal National Pollutant Discharge Elimination System Permit (NPDES) program for stormwater discharges. The Region holds the Statewide Industrial Stormwater Permit for General Construction Activities. Soil disturbance of five acres or more must be in compliance with this permit. The project sponsor must submit a Notice of Intent to the RWQCB and prepare a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would 1) help identify sources of sediment and other pollutants that affect the quality of storm water discharges, and 2) describe and ensure the implementation of practices to reduce sediment and other pollutants in storm water discharges. The SWPPP must include Best Management Practices (BMPs) that address source reduction and, if necessary, treatment. The SWPPP must be maintained onsite, but does not require submittal to the RWQCB.

Los Angeles County holds the Municipal Activities NPDES permit and must prepare a Drainage Area Master Plan. The County will be contacted to determine the measures needed for construction activities to comply with the plan. No mitigation measures are necessary beyond those required by law.

The proposed project does not involve storage or handling of hazardous materials and has no potential to adversely impact surface water, ground water, or the public water supply.

K. AIR QUALITY (Checklist Questions 16 and 18)

Air Quality Standards

Air quality is determined primarily by the type and amount of contaminants emitted into the atmosphere, the size and topography of the Basin, and its meteorological conditions. The Basin has low mixing heights and light winds which are conducive to the accumulation of air pollutants.

Air quality is measured by comparing contaminant levels in ambient air samples to national and state standards. These standards are set by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) at levels to protect public health and welfare with an adequate margin of safety. National ambient air quality standards were first authorized by the federal Clean Air Act of 1970. California ambient air quality standards were authorized by the state legislature in 1967. The California Ambient Air Quality Standards (CAAQS) describe adverse conditions; that is, pollution levels must be below these standards before a Basin can attain the standard. National Ambient Air Quality Standards (NAAQS) describe acceptable conditions. Air quality is considered in "attainment" if pollutant levels equal the standards continuously and exceed them no more than once each year. California standards generally are more stringent than the national standards.

Air quality standards specify the upper limits of concentrations and durations in the ambient air consistent with the management goal of preventing specific harmful effects. There are national and state standards for ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), PM10 (airborne particulates with an aerodynamic diameter less than 10 microns), sulfur dioxide, and lead. These are termed "criteria" pollutants. The SCAQMD also measures for compliance with two other state standards: sulfate and visibility. In addition, California has set standards for hydrogen sulfide and vinyl chloride, but these are not measured at any SCAQMD monitoring stations because they are not considered to be a problem in the Basin. Federal and state air quality standards are illustrated in Table 4.

Air Quality Impacts

Potential air quality impacts from highway projects are commonly separated into two groups: short-term and long-term. Short-term impacts could result from fugitive dust emissions during demolition and grading activities, as well as from construction equipment exhaust emissions. Long-term impacts could result from any increased highway traffic following project completion.

A project is normally considered to have a significant adverse air quality impact if it would "...conflict with adopted environmental plans and goals of the community where it is located" or would "violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations" (CEQA Guidelines, Appendix G).

Because the project would alleviate existing traffic congestion and would not generate any long-term traffic increase nor appreciably alter travel paths, it would not generate any long-term adverse changes to local or regional air quality. (Further, by reducing congestion and delays through the interchange, the project would decrease automotive emissions, thereby improving local air quality.)

TABLE 4
AMBIENT AIR QUALITY STANDARDS

Air Pollutant	CALIFORNIA	FEDERAL	
	Concentration	Primary (>)	Secondary (>)
Ozone	0.09 ppm, 1-hr. avg. >	0.12 ppm, 1-hr. avg.	0.12 ppm, 1-hr. avg.
Carbon Monoxide	9 ppm, 8-hr. avg. >[a] 20 ppm, 1-hr. avg. >	9 ppm, 8-hr. avg.[b] 35 ppm, 1-hr. avg. >	9 ppm, 8-hr. avg 35 ppm, 1-hr. avg. >
Nitrogen Dioxide	0.25 ppm, 1-hr. avg. >[c]	0.053 ppm, annual avg.[d]	0.053 ppm, annual avg. [e]
Sulfur Dioxide	0.05 ppm, 24-hr. avg.>=with ozone>=0.10 ppm, 1-hr. avg. or TSP >= 100 ug/m^3, 24-hr. avg. 0.25 ppm, 1-hr. avg.>[e]	0.03 ppm, annual avg. 0.14 ppm, 24-hr. avg.	0.50 ppm, 3-hr. avg.
Suspended Particulate Matter (PM10)	30 ug/m^3, annual geometric mean > 50 ug/m^3, 24-hr. avg. >[f]	50 ug/m^3, annual[g] arithmetic mean 150 ug/m^3, 24-hr. avg.	50 ug/m^3, annual [g] arithmetic mean 150 ug/m^3, 24-hr. avg.
Sulfates	25 ug/m^3, 24-hr. avg. >=		
Lead	1.5 ug/m^3, 30-day avg. >=	1.5 ug/m^3, calendar quarter	1.5 ug/m^3, calendar quarter
Hydrogen Sulfide	0.03 ppm, 1-hr. avg. >=		
Vinyl Chloride	0.010 ppm, 24-hr. avg. >=		
Visibility Reducing Particles	In sufficient amount to reduce the visual range to less than 10 miles at relative humidity less than 70%, 8-hr. avg. (9am-5pm)[h]		

[a] Effective December 15, 1982. The standards were previously 10 ppm, 12-hour average and 40 ppm, 1-hour average.
[b] Effective September 13, 1985, standard changed from > 10 mg/m^3 (>= 9.3 ppm) to > 9ppm (>= 9.5 ppm).
[c] Effective March 9, 1987, standard changed from >= .25 ppm to > .25 ppm.
[d] Effective July 1, 1985, standard changed from > 100 ug/m^3 (> .0532 ppm) to > .053ppm (> .0534 ppm).
[e] Effective October 5, 1984. The standard was previously .5 ppm, 1-hour average.
[f] Effective August 19, 1983. The standards were previously 60 ug/m^3 TSP, annual geometric mean, and 100 ug/m^3 TSP, 24-hour average.
[g] Effective July 1, 1987. The standards were previously: Primary- Annual geometric mean TSP > 75 ug/m^3, and a 24-hour average TSP > 260 ug/m^3. Secondary- Annual geometric mean TSP > 60 ug/m^3, and a 24-hour average TSP > 150 ug/m^3.
[h] Effective October 18, 1989. The standard was previously "In sufficient amount to reduce the prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 observation", and was based on human observation rather than instrumental measurement.
Source: South Coast Air Quality Management District, April 1991.

Short-Term Construction Emissions

Interchange construction activities would produce two types of air contaminants: (1) exhaust emissions from construction equipment, and (2) fugitive dust resulting from demolition activities and soil movement. These construction impacts would be temporary in nature, and not unlike other construction projects.

Construction Equipment Exhaust Emissions

Construction activities would generate localized exhaust emissions from utility engines, on-site heavy-duty construction vehicles, and equipment hauling materials to and from the site. The quantity of emissions would vary daily as construction activities change, but would disperse without significant impact on the surrounding area. Further, because existing local emissions from the freeway are many times greater than the additional increment from interchange construction activities, the short-term impact during project construction would be indistinguishable from existing

local air quality patterns along the freeway. For these reasons, construction equipment exhaust emissions would be less than significant. No mitigation measures are necessary.

Fugitive Dust Emissions

Temporary fugitive dust (PM_{10}) impacts would result from project construction activities. A variety of activities generate these emissions, including travel on paved and unpaved roads and in the parking area, demolition operations, dirt storage piles, dirt pushing and grading activities, and truck dumping activities. The quantity of dust generated depends on a large number of variables such as acreage of land being worked, soil moisture, silt content, wind speed, disturbance level, and other factors.

Large-diameter construction dust, which settles out on nearby buildings, parked cars, foliage, and other surfaces is more of a soiling nuisance than a potential health impact. Further, all highway construction contracts must comply with Section 10, "Dust Control", of Caltrans' Standard Specifications. Requirements include the application of either water or dust palliatives, or both, for the alleviation or prevention of dust nuisance. With implementation of these measures, fugitive dust emissions would be less than significant. No mitigation measures are necessary.

Local Emissions

The primary mobile source pollutant of local concern is CO. Carbon monoxide is a direct function of vehicle idling time and, thus, traffic flow conditions. Carbon monoxide transport is extremely limited, it disperses rapidly with distance from the source, under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors. Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service. In areas with high ambient background CO concentration, modeling of CO concentrations is recommended in determining a project's effect on local CO levels.

For CEQA purposes, a sensitive receptor is generically defined as a location where human populations, especially children, seniors, and sick persons, are located where there is reasonable expectation of continuous human exposure according to the averaging period for the Ambient Air Quality Standards (e.g., 24-hour, 8-hour, 1-hour). These typically include residences, hospitals, and schools. Examples of reasonable receptor sites are: property line of hospitals, rest homes, schools, and playgrounds; property lines or setbacks of residences where continuous outdoor exposure is expected; parking lot where pedestrians have continuous access; and, sidewalks where the general public has access on a continuous basis.

In the determination of whether intersections affected by project traffic should be selected for CO hot spot analysis, in addition to project-related degradation of traffic, greater overall traffic congestion, and larger overall traffic volumes, it is important to examine the intersections that have continuous sensitive receptor exposure potential, or have sensitive uses adjacent to the affected intersections. One of the steps suggested by the SCAQMD to assess local CO impact is to

"determine if sensitive receptors are located in that area" (page 9-10, SCAQMD CEQA Air Quality Handbook). In this case, there are no residences or other sensitive uses within the areas most likely to be impacted by the proposed project. Therefore, no CO hot spot analysis is necessary.

Conformity

The Clean Air Act Amendments (CAAA) of 1990 require that transportation plans, programs, and projects which are funded by or approved under title 23 U.S.C. or Federal Transit Act conform with state and federal air quality plans. To be found in conformance, a project must come from approved transportation plans and programs such as the State Implementation Plan (SIP), the Regional Transportation Plan (RTP), and the Regional Transportation Improvement Program (RTIP). The I-710/Firestone Boulevard interchange project is identified in the 1993-99 RTIP and, therefore, is in conformance, as required by the CAAA. No mitigation measures are necessary.

In addition, the proposed project conforms with the purpose of the State Implementation Plan (SIP) to eliminate or reduce the severity and number of violations of the NAAQS and achieve expeditious attainment of such standards. The proposed project would not be expected to cause or contribute to a violation of NAAQS for carbon monoxide.

L. NOISE (Checklist Questions 19 and 20)

Noise is generally defined as unwanted sound, and consists of any sound that produces adverse physiological or psychological responses and annoyance, and/or interferes with speech communication, rest, recreation, or work. Sound is defined technically in terms of its loudness (amplitude) and pitch (frequency). Loudness is the strength of a sound and is measured by the magnitude, or amplitude, of the sound wave. Pitch is the number of complete vibrations of a sound wave, measured in cycles per second, and results in the tonal range from high notes to low notes. Various sound levels associated with common sources and the corresponding human responses are provided in Figure 8. Appendix A contains definitions of various terms used in this analysis.

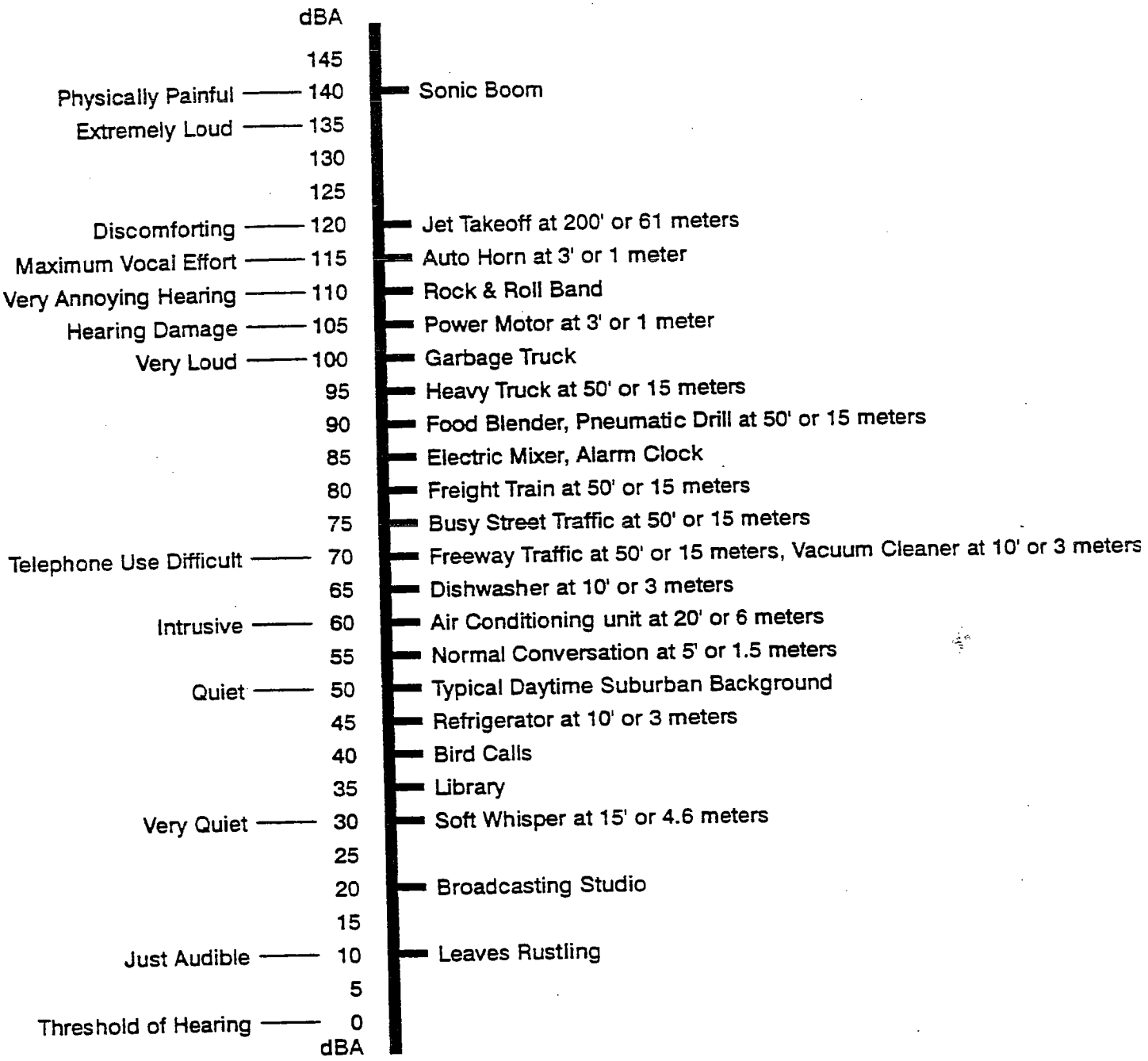
Percentile Sound Level

Another descriptor for noise, the percentile sound level, is the statistical A-weighted noise level exceeded a given percentage of the time. Percentile sound levels are used to define the ambient environment. For example, the L_{50} is the level exceeded 50 percent of the time and can be used to approximate the average sound level. The L_{90} is exceeded 90 percent of the time and can be used to describe the quietness of an area or to quantify the contribution to the time-varying noise environment from continuously-operated noise sources.

Noise Standards

Federal, state, and local governments have established noise standards and guidelines to protect citizens from potential hearing damage and various other adverse physiological and social effects associated with noise from various sources. Following is a discussion of the applicable noise

SOUND LEVELS AND HUMAN RESPONSE



Source: Adapted from Wiliam Bronson, "Ear Pollution," CALIFORNIA HEALTH (October, 1971), P. 29

THE PLANNING CENTER

standards for the proposed project, addressing noise levels generated by short-term construction activities.

Federal and State

To date, no federal or state criteria addressing short-term construction noise impacts on a community have been established. Nonetheless, the federal Environmental Protection Agency regulates maximum noise emissions from certain types of construction equipment (Noise Control Program, Part 204 of Title 40, Code of Federal Regulations). Presently, air compressors are the only equipment under strict regulation.

City of South Gate

The goal of the "South Gate General Plan Noise Element" is to provide a safe, healthy acoustic environment for South Gate's citizens, free of excessive noise. Policies 3.1 through 3.3 require evaluation of construction-generated noise and enforcement of the South Gate Noise Ordinance to mitigate noise conflicts. While the Noise Ordinance does not specifically address project construction activities, it prohibits the generation of any "loud, unnecessary or unusual noise...which disturbs the peace and quiet of any neighborhood" (Municipal Code Section 11.29.120). The Noise Ordinance also prohibits activities which increase the average ambient noise level at adjacent residential properties by more than 5 decibels for more than one hour.

Noise-Sensitive Land Uses

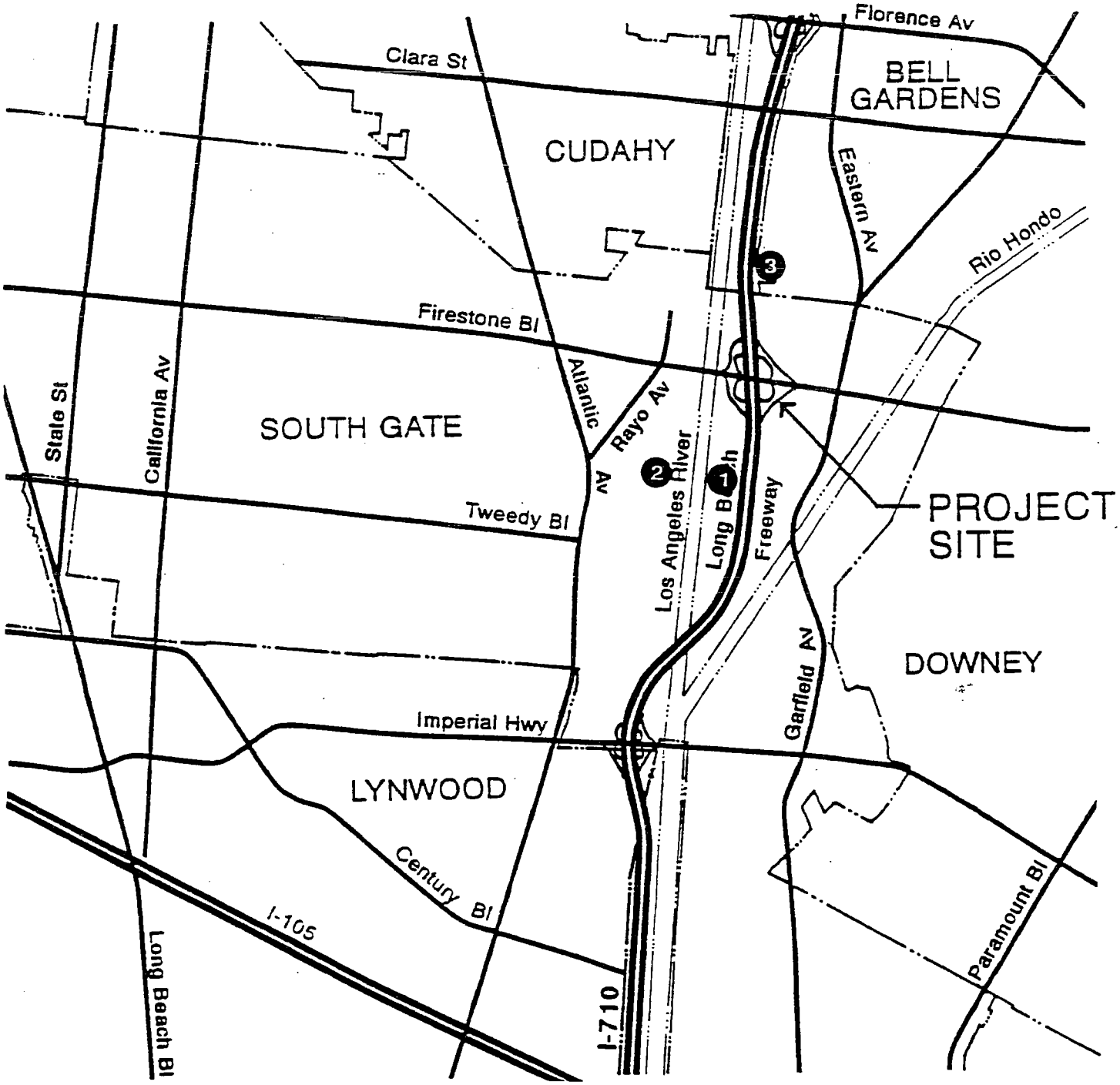
Noise-sensitive land uses in the study area were identified through land use maps and a study area survey. Because the project site is located in the northeast portion of South Gate, the survey extended northward into the Cities of Cudahy and Bell Gardens and eastward into the City of Downey.

No noise-sensitive land uses immediately border the project site. Noise-sensitive land uses within potentially audible range of the project site are: (1) mobile homes on Frontage Road in South Gate, 300 meters southwest of the project site, (2) single-family residences on Salt Lake Avenue in South Gate, 600 meters southwest of the project site, and (3) multi-family residences on Shull Street in Bell Gardens, 460 meters northeast of the project site. These locations are identified in Figure 9.

Noise Measurement Survey

A noise measurement survey was conducted on June 26, 1995, to measure ambient noise levels at the locations identified in Figure 9. Measurements were conducted following the procedures outlined in the FHWA manual "Sound Procedures for Measuring Highway Noise: Final Report" DP-45-1R, of August 1981. Noise levels were recorded using a calibrated Model 700 Precision Sound Level Dosimeter and Analyzer manufactured by Larson Davis. (This meter meets the type II standard as defined in the American National Standard Institute [ANSI] S1.4-1971.) Measurements were conducted during afternoon periods of heavy but still freely flowing traffic on I-710, and all measurements represent ground floor receptors. Results of these measurements are presented in Table 5.

NOISE MEASUREMENT LOCATIONS



I-710/Firestone Boulevard Improvements
Figure 9

TABLE 5
NOISE MEASUREMENT LEVELS

Location (see Figure 9)	Date	Time	Leq	Lmax	Lmin	L10	L50	L90
1: Trailer Park, Frontage Rd, South Gate	6/26/95	15:45	76.6	81.0	72.0	78.0	76.0	74.5
2: Single-Family Residences, Salt Lake Ave, South Gate	6/26/95	13:30	59.9	74.5	50.0	62.5	53.5	51.0
3: Multi-Family Residences, Shull Street, Bell Gardens	6/26/95	15:15	71.2	75.0	67.0	73.0	70.5	69.0

Because of their proximity to I-710, the mobile homes on Frontage Road in South Gate (Location 1) and multi-family residences on Shull Street in Bell Gardens (Location 3) are subject to high noise levels: 76.6 Leq and 71.2 Leq, respectively. These noise levels result primarily from freeway mainline traffic. Interchange traffic does not appreciably affect ambient noise levels at these residential locations.

The single-family residences on Salt Lake Avenue in South Gate are shielded from I-710 traffic noise by tall manufacturing buildings. Consequently, these residences are subject to much lower noise levels of 59.9 Leq.

Noise Impacts

Potential noise impacts from highway projects are commonly separated into two groups: short-term and long-term. Short-term impacts could result from noise generated by equipment during project construction activities. Long-term impacts could result from highway traffic following project completion.

Long-Term Noise Impacts

The project would alleviate existing traffic congestion, but would not generate any long-term traffic increase nor appreciably alter travel paths. Traffic would flow better with the proposed improvements, which would result in an increase in traffic speed. The increase in traffic speed would contribute to long-term noise level increases smaller than 1 dBA, which is considered a less than significant impact. No mitigation measures are necessary.

Exposure to Short-Term Construction Noise

Potential noise impacts would be limited to those generated during short-term construction activities, given that no long-term noise impacts are anticipated.

A project is normally considered to have a significant adverse noise impact if it would "...conflict with adopted environmental plans and goals of the community where it is located" or would "...increase substantially the ambient noise levels for adjoining areas" (CEQA Guidelines, Appendix

G). For this analysis, construction-related noise level increases conflicting with the South Gate Noise Ordinance or General Plan Noise Element would be considered a significant adverse impact.

The project would be constructed in several discrete phases, each generating its own noise level. Highway construction activities typically include:

- Mobilization of construction equipment
- Demolition of existing structures
- Ground clearing and excavation
- Embankment construction
- Placement of foundations
- Pile driving
- Bridge and retaining wall construction
- Base preparation
- Paving
- Cleanup

Each construction phase requires the use of many pieces of heavy equipment, both mobile and stationary. Mobile equipment such as dozers, scrapers, and graders operate in a cyclic fashion in which a period of full power is followed by a period of reduced power. Stationary equipment is commonly divided into two groups. One group contains such items as pumps, generators, and compressors and generally operates at a fixed power, producing a fairly constant noise level under normal operation. The other group contains high-impact equipment such as pile drivers, jackhammers, and pavement breakers, generating high intensity, episodic noise levels.

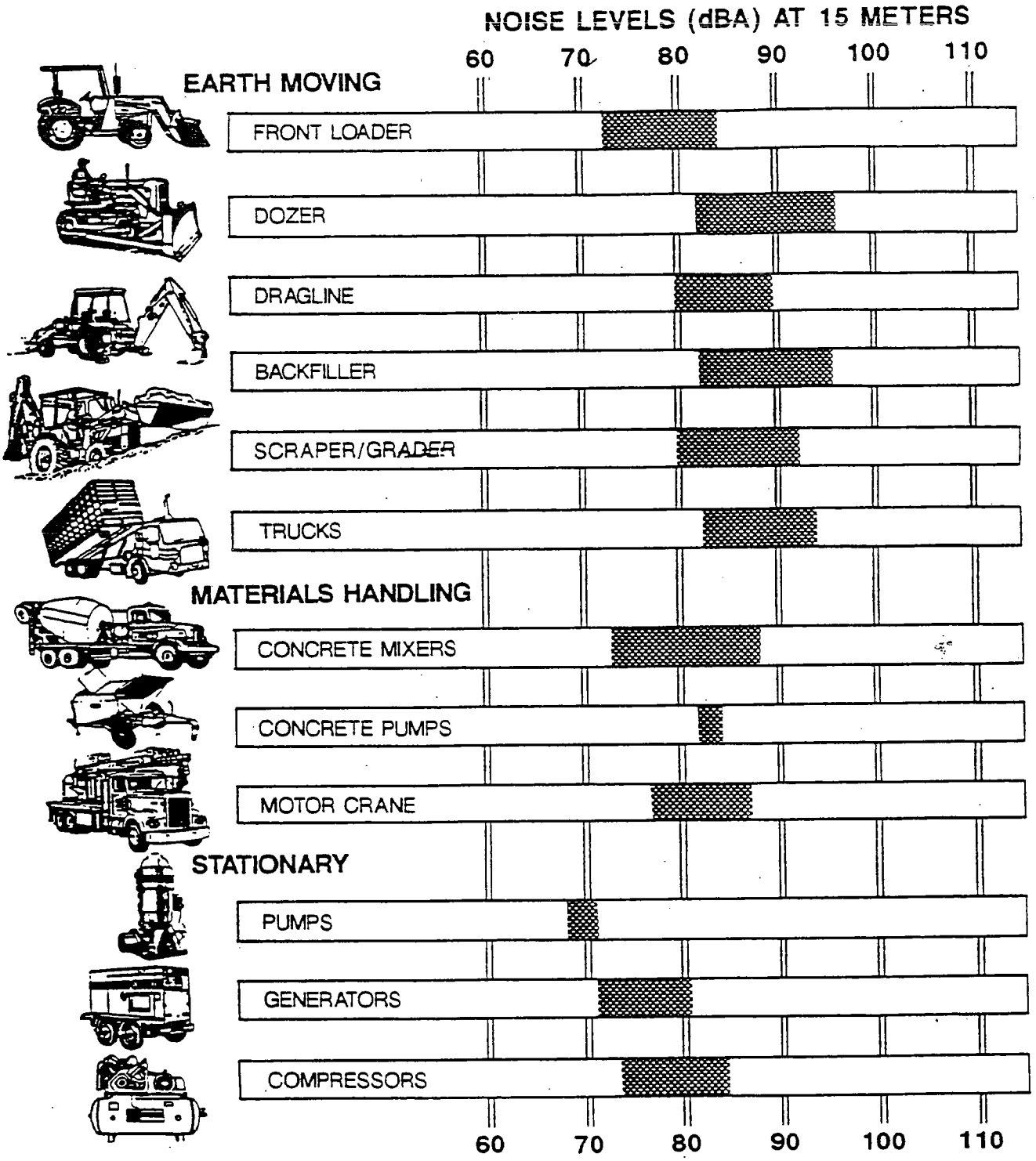
Average noise level ranges from common construction equipment are presented in Figure 10. The noise levels presented are at a reference distance of 15 meters. Construction equipment noise levels typically decrease at a rate of 6 dBA per doubling of the reference distance. Therefore, at 30 meters construction noise levels would be 6 dBA less than reported in Figure 10. At 300 meters, representing the distance to the mobile homes on Frontage Road, construction noise levels would be 26 dBA less. Intervening structures or topography would act as noise barriers, further reducing noise levels. For example, the tall manufacturing buildings separating residences on Salt Lake Avenue from I-710 would provide an additional reduction of up to 20 dBA.

Project construction activities could increase ambient noise levels at the nearest residential areas by less than 3 dBA. This short-term increase would comply with the South Gate Noise Ordinance and General Plan Noise Element and is considered less than significant. All construction-related noise level increases would terminate upon project completion. No mitigation measures are necessary.

M. GLARE (Checklist Question 21)

To minimize traffic disruption, portions of the demolition and construction of the interchange would occur during the nighttime hours, resulting in a temporary increase in light and glare. Once constructed, however, this project would not add significant additional lighting or glare to the area.

CONSTRUCTION EQUIPMENT NOISE LEVELS



SOURCE: EPA, 1971; "NOISE FROM CONSTRUCTION EQUIPMENT AND OPERATIONS, BUILDING EQUIPMENT, AND HOME APPLIANCES". NTID300.1

The location of shadows produced by the new interchange would be similar to the existing interchange. No mitigation measures are necessary.

N. BIOLOGY (Checklist Questions 22, 23, 26, 27, 28, and 29)

The Los Angeles River and Rio Hondo Channel are concrete lined and possess little or no value for native wildlife species.

O. GROWTH, COMMUNITY, AND BUSINESS IMPACTS (Checklist Questions 33-36, 38, and 40)

The proposed freeway interchange improvement is needed due to existing and projected traffic volumes and to alleviate existing and future traffic congestion from planned urban development. The project involves a reconstruction of the interchange and improvements to Firestone Boulevard. It does not have potential to affect the location, distribution, density or growth rate of the population, nor would it affect life-styles, neighborhood character or stability. No minority, elderly, handicapped, transit-dependent, or other specific interest group would be impacted by the project. The project has no potential to divide or disrupt an established community. No housing, farm, commercial or other non-residential business would be displaced as a result of the project. Only a limited number of temporary construction jobs would be created from this short-term project and housing in the area is assumed to be adequate to accommodate the required construction workers.

P. PUBLIC SERVICES (Checklist Question 41)

There would be limited, short-term impacts on police (traffic control), fire, or emergency services during the construction phase as is typical of any road improvement project under construction, since this may cause temporary increases in traffic congestion. These impacts would not be significant and would terminate upon project completion.

Q. TRANSPORTATION (Checklist Questions 42 and 43)

Refer to Appendix B, I-710 Freeway NB/SB Ramps and Firestone Boulevard Signalization Improvements (Austin-Foust Associates, Inc., October 1995), for a complete discussion of the traffic impacts associated with the proposed project. Following is a summary of that report.

The proposed project would result in temporary disruptions of traffic during demolition and construction. To compensate for reduced roadway capacity during construction, a Traffic Management Plan (TMP) will be developed whereby temporary signalization of the off-ramps is provided during construction. A computerized traffic flow simulation analysis reveals sufficient capacity can be provided on Firestone Boulevard to ensure the off-ramps do not back up and interfere with the freeway mainline. Additionally, California Highway Patrol (CHP) and Caltrans staff will be required periodically to provide traffic control assistance, particularly when temporary or over-night closures are to be implemented.

Once constructed, the project would have long-term beneficial impacts in reducing traffic congestion in this area through the year 2015. Specifically, the project would result in appreciable decreases in delay at the southbound I-710/Firestone Boulevard and northbound I-710/Firestone Boulevard intersections. Reduced congestion would likely lead to reduced accident rates.

R. LARGE COMMERCIAL/RESIDENTIAL DEVELOPMENT (Checklist Question 47)

The City of South Gate has redevelopment plans for the area north of Firestone Boulevard and east of I-710. These projects, along with projects within the City of Downey, are anticipated to bring additional traffic volumes to Firestone Boulevard and the interchange. With implementation of the proposed interchange improvements (as well as programmed improvements on Firestone Boulevard), traffic from redevelopment would not be significant.

S. CULTURAL RESOURCES (Checklist Question 48)

The project site is vacant land, except for the existing interchange, and is located in a highly developed urban environment, adjacent to the freeway. There are no significant cultural resources on-site; the project does not have potential to eliminate important examples of the major periods of California history or prehistory.

T. CONSTRUCTION IMPACTS (Checklist Question 51)

The proposed project would generally allow continued use of the interchange during all phases of construction. However, minimal short duration closures may occur. There would be limited, short-term impacts on police (traffic control), fire or emergency services during the construction phase typical of any road improvement project under construction. Short-term impacts on noise and air quality are also likely during construction. All impacts would terminate upon project completion. A Traffic Management Plan (TMP) will be required to maximize traffic flows and minimize land use conflicts during construction.

The I-105 provides some opportunity to re-route Firestone Boulevard traffic away from the interchange during construction. There is little surplus capacity on the two adjacent parallel arterials, Imperial Highway and Florence Avenue. Further, since the Firestone Boulevard/I-710 ramps are all carrying heavy traffic volumes (i.e., 15,000 to 19,000 ADT), and the adjacent ramps at Imperial Highway and Florence Avenue carry 15,000 to 22,500 ADT, little opportunity exists to divert Firestone Boulevard traffic to alternate routes other than the new I-105 freeway itself.

A computerized traffic flow simulation analysis (TRANSYT) was conducted by Austin-Foust Associates to determine whether reasonable traffic flow can be maintained during construction. This analysis revealed temporary signalization of the off-ramps and maintaining a five-lane section on Firestone Boulevard (three eastbound and two westbound lanes) would ensure that the off-ramps do not back up and interfere with the freeway mainline.

The TMP also provides the opportunity to protect residential areas during construction. The TMP must evaluate the capacity of alternative arterial routes and supplement that capacity as necessary

to prevent intrusion of traffic into residential areas. This supplemental capacity may take the form of signing for alternate routes and installation of additional capacity at critical locations.

The TMP will also have to accommodate temporary closures of the freeway and/or Firestone Boulevard, at least for brief periods, for removal and/or placement of bridge girders, etc. These closures may be conducted during late night hours, with traffic opened before the morning commuter period. The TMP will need to designate appropriate detour routes around these temporary closures. These temporary detours must utilize arterial routes and protect residential neighborhoods against unwanted intrusion. Implementation of the following mitigation measure will keep construction impacts to a less than significant level.

Mitigation Measures

1. A Traffic Management Plan shall be approved by the City of South Gate and Caltrans prior to initiation of construction activities.

V. CONSULTATION AND COORDINATION

The City of South Gate will hold a public hearing to receive comments on the Initial Study/Environmental Assessment. In addition, the agencies listed below were consulted in the development of this Initial Study/Environmental Assessment.

A. AGENCIES CONSULTED

Federal Agencies

Federal Highway Administration (Lead Agency)

David H. Densmore
Region IX, California Division
890 9th Street, Suite 400
Sacramento, CA 95814-2724

State Agencies

California Department of Transportation (Lead Agency)

Jack Kao
Traffic Management

Krieg Larson
Environmental Planning

Khiem Nguyen
Local Programs

Hitesh Patel
Local Programs

Louis Vlokhardt
Hazardous Waste Unit

Los Angeles County Agencies

Museum of Natural History

Kimball Garrett
Manager, Vertebrate Collection

Local Agencies

City of South Gate (Lead Agency)

Eugene Moy
Redevelopment Department

John Garcia
Public Works

B. INITIAL STUDY/ENVIRONMENTAL ASSESSMENT RECIPIENTS

Federal Agencies

Federal Highway Administration (Lead Agency)
Region IX, California Division
980 9th Street
Suite 400
Sacramento, CA 95814-2724

U.S. Army Corps of Engineers
Los Angeles District
PO Box 2711
Los Angeles, CA 90053-2325

U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

U.S. Fish and Wildlife Service

State Agencies

California Department of Fish and Game
District 5 Office
330 Golden Shore, Suite 50
Long Beach, CA 90802

California Department of Transportation (Lead Agency)
Caltrans, District 7
120 South Spring Street
Los Angeles, CA 90012

California Transportation Commission
1120 "N" Street
Sacramento, CA 95814

Regional Water Quality Control Board
Los Angeles Region (4)
1075 S. Broadway, Rm. 4027
Los Angeles, CA 90012

Los Angeles County Agencies

Los Angeles County Department of Public Works

Local Agencies

City of South Gate (Lead Agency)
8650 California Avenue
South Gate, CA 90280

South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

Southern California Association of Governments
818 W. Seventh Street, 12th Floor
Los Angeles, CA 90017

VI. LIST OF PREPARERS

Under the direction of Caltrans staff, this Initial Study/Environmental Assessment was prepared by The Planning Center in association with IWA Engineers, Austin-Foust Associates, and AGRA Earth & Environmental.

The Planning Center

Dwayne S. Mears, AICP	Principal, Environmental Planner
Robert Reider	Air Quality and Noise Specialist
Scott Hamilton	Consulting Biologist

IWA Engineers

Marie Marston, PE	Project Manager
Scott Fales, PE	Project Engineer

Austin-Foust Associates

Joe Foust, PE	Principal, Traffic
Cathy Lawrence, PE	Transportation Engineer

AGRA Earth & Environmental

Doug Harriman	Environmental Project Manager (Hazardous Materials)
Rudy Coto	Environmental Services Manager (Hazardous Materials)

VII. DETERMINATION

On the basis of this evaluation, it is determined that the appropriate environmental document for the proposal is a Negative Declaration. Although the proposal could have a significant effect on the environment, there will not be a significant effect because the mitigation measures described have been added to the project.

Ronald Kosinski — Sept 6, 1996

RONALD ~~KOSI~~NSKI
Chief, Office of Environmental Planning
Caltrans, District 7

Hitesh Patel — Sept. 6, 1996

HITESH PATEL
Project Manager
Caltrans, District 7

APPENDIX A

NOISE

APPENDIX A
NOISE

Noise Scales

Decibel

The standard unit of measurement of sound loudness is the decibel (dB). Decibels are based on the logarithmic scale to account for large variations in sound amplitudes. In terms of the human response to noise, a sound 10 dB higher than another sound is perceived to be twice as loud, and 20 dB higher is four times as loud, etc. Everyday sounds normally range from 30 dB, considered very quiet, to 100 dB, considered very loud.

A-Weighting

Different sounds typically have different frequency content. When describing sound and its effect on a human population, A-weighted sound levels (dBA) are typically used to account for the response of the human ear. The term "A-weighted" refers to a filtering of the noise signal to emphasize frequencies in the middle of the audible spectrum and to de-emphasize low and high frequencies in a manner corresponding to the way the human ear perceives sound. This filtering network was established by the American National Standards Institute (ANSI, 1983). The A-weighted noise level has been found to correlate well with peoples' judgements of the noisiness of different sounds and has been used for many years as a measure of community noise.

Equivalent Sound Level

Community noise levels typically change continuously during the day and also exhibit daily, weekly, and yearly patterns. To compare noise levels over different time periods, several descriptors have been developed. One descriptor is the equivalent sound level (Leq). The Leq is the equivalent steady-state, A-weighted sound level during a specified time interval. The hourly Leq is often used to describe peak-hour traffic noise.

APPENDIX B

AIR QUALITY

APPENDIX B
AIR QUALITY

Air Quality Management

The California Legislature created the SCAQMD in 1977 (Lewis-Presley Air Quality Management Act). The SCAQMD is responsible for developing and enforcing air pollution control rules and regulations for stationary sources (such as factories) in the Basin. Mobile sources, such as cars and trucks, are primarily controlled by the California Air Resources Board (ARB). The SCAQMD is required to adopt an Air Quality Management Plan (AQMP) that demonstrates compliance with all state and federal air quality standards and adopt regulations that carry out the AQMP. These regulations must be approved by ARB and the U.S. Environmental Protection Agency (EPA). The SCAQMD developed its first AQMP in 1979. The AQMP was then updated in 1982, 1988, and again in 1991. In September 1994, the SCAQMD Governing Board approved the 1994 update of the AQMP.

The ARB oversees the activities of local air quality management agencies and is responsible for incorporating air quality management plans for local air basins into a State Implementation Plan (SIP) for approval by EPA. Additionally, ARB maintains air quality monitoring stations throughout the state in conjunction with local Air Quality Management Districts. Data collected at these stations are used by the ARB and EPA to classify air basins as "attainment" or "non-attainment" with respect to each pollutant and to monitor progress in attaining state and federal air quality standards.

Climate/Meteorology

The climate of the Basin is determined by its terrain and geographical location. The Basin is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border and high mountains surround the rest of the Basin. The region lies in the semipermanent high pressure zone of the eastern Pacific. The resulting climate is mild, tempered by cool ocean breezes. This mild climatological pattern is rarely interrupted; however, there do exist periods of extremely hot weather, winter storms, or Santa Ana wind conditions.

The annual average temperature varies little throughout the Basin, ranging from the low to the middle 60's measured in degrees Fahrenheit. With a more pronounced oceanic influence, the coastal areas show less variability in annual minimum and maximum temperatures than the inland areas. All areas in the Basin have recorded temperatures well above 100°F in recent years. January is typically the coldest month within the Basin.

The majority of annual rainfall in the Basin occurs between the months of November and April. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the basin and along the coastal side of the mountains. Monthly and yearly rainfall totals are extremely variable.

Even though the Basin has a semi-arid climate, the air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. Downtown Los Angeles wind speed averages 5.7 miles per hour with little seasonal variation; wind speeds average slightly higher in the summertime than during the winter. Inland areas have slightly lower wind speeds than Downtown Los Angeles, while coastal winds average about two miles per hour higher. The dominant daily wind pattern is an onshore daytime breeze and an offshore night-time breeze. The typical wind flow pattern fluctuates only with occasional winter storms or strong northeasterly Santa Ana winds from the mountains and deserts north of the Basin.

During spring and early summer, pollution produced during any one day is typically blown out of the Basin through the mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. Air contaminants can be transported sixty miles or more from the Basin by ocean air during the afternoons. From early fall to winter, the transport is less pronounced because of slower average wind speed and the appearance of drainage winds earlier in the day. During stagnant wind conditions, offshore drainage winds may begin by the late afternoon. Pollutants remaining in the Basin are trapped and begin to accumulate during the night and the following morning. A low morning wind speed in pollutant source areas is an important indicator of air stagnation and the build-up potential for primary air contaminants.

With persistent low inversions and cool coastal air, morning fog and low stratus clouds are common. However, 73% of possible sunshine is recorded in Downtown Los Angeles. This is an extremely important climatological factor considering the role of sunshine in the photochemical smog production process. Cloudy days are less likely in the eastern portions of the Basin and about 25 percent greater along the coast.

The vertical dispersion of air pollutants in the Basin is limited by temperature inversions in the atmosphere close to the earth's surface. Temperature normally decreases with altitude and a reversal of this atmospheric state, where temperature increases with altitude, is called an inversion. The height from the earth to the inversion base is known as the "mixing height."

Inversions are generally lower in the nighttime when the ground is cool than during the daylight hours when the sun warms the ground and, in turn, the surface air layer. As this heating process continues, the temperature of the surface air layer approaches the temperature of the inversion base causing heating along its lower edge. If enough warming takes place, the inversion layer becomes weak and opens up to allow the surface air layers to mix upward. This can be seen in the middle to late afternoon on a hot summer day when the smog appears to clear up suddenly. Winter inversions typically break earlier in the day, preventing excessive contaminant build-up.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high winds speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino counties. In the winter, the greatest pollution problems are carbon monoxide and oxides of nitrogen because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine

combine to cause a reaction between hydrocarbons and oxides of nitrogen to form photochemical smog.

Air Pollution Constituents

The health effects and sources of the criteria pollutants are briefly described below.

Ozone

Ozone (smog) is formed by photochemical reactions between oxides of nitrogen and reactive organic gases rather than being directly emitted. Ozone is a pungent, colorless gas that is typical of the southern California type smog. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly and young children. Ozone levels peak during the summer and early fall months.

Carbon Monoxide

Carbon monoxide (CO) is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. CO passes through the lungs into the blood stream where it interferes with the transfer of oxygen to body tissues.

Nitrogen Oxides

Nitrogen oxides (NOx) contributes to other pollution problems, including high concentration of fine particulate matter, poor visibility, and acid deposition. Nitrogen dioxide decreases lung function and may reduce resistance to infection. Nitrogen dioxide, a reddish-brown gas (NO_2), and nitric oxide (NOx), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides or NOx. NOx is a primary component of the photochemical smog reaction.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless irritating gas formed primarily from the incomplete combustion of sulfur containing fuels. Industrial facilities also contribute to gaseous sulfur dioxide levels in the Basin. Natural gas is low in sulfur and low-sulfur fuels are now available on the market. Sulfur dioxide irritates the respiratory tract and can injure lung tissue when combined with fine particulate matter. Sulfates reduce visibility and therefore, the level of sunlight.

Reactive Organic Gases

Reactive organic gases (ROG) are formed from combustion of fuels and the evaporation of organic solvents. ROG is a prime component of the photochemical smog reaction. Consequently, ROG accumulates in the atmosphere more quickly during the winter when sunlight is limited and photochemical reactions are slower.

Particulate Matter

Particulate matter (PM_{10}) refers to small suspended particulate matter with an aerodynamic diameter of 10 microns or less which is not readily filtered out by the lungs. Nitrates and sulfates, as well as dust particulates, are major components of PM_{10}. These small particles can be directly emitted into the atmosphere as a by-product of fuel combustion, through abrasion, such as wear on tires or brake linings, or through fugitive dust (wind erosion of soil). They can also be formed in the atmosphere through chemical reactions. Particulates may carry carcinogens and other toxic compounds that adhere to the particle surfaces and can enter the human body through the lungs.

Interstate Route 710/Firestone Boulevard Interchange Project
Phase III - Improvements Over Rio Hondo Channel

ENVIRONMENTAL REEVALUATION ADDENDUM

Title: Interstate Route 710/Firestone Boulevard, Phase III - Improvements Over Rio Hondo Channel

Clearinghouse No: 1996101004

Contact: Ron Kosinski, Deputy District Director
Division of Environmental Planning
Caltrans, District 7
120 S. Spring Street
Los Angeles, CA 90012
(213) 897-0703

Date: November 17, 2003 (Revisal of October 2003)

ABSTRACT

This Environmental Reevaluation/Addendum addresses the Interstate Route 710 (I-710)/Firestone Boulevard Improvements Over Rio Hondo Channel Phase III project with respect to environmental regulations and project changes since the Negative Declaration/Finding of No Significant Impact (ND/FONSI) that was approved in September 1996. This Environmental Reevaluation/Addendum analyzes proposed improvements along Firestone Boulevard outside the State's right-of-way (ROW) east of the I-710/Firestone interchange, for compliance with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA).

Since the ND/FONSI was approved, there have been no significant design changes to the project that would require new analysis, cause adverse impacts, or cause the conclusions of the previous ND/FONSI to be invalid. The proposed project complies with new environmental regulations adopted after the approval of the ND/FONSI. There are no new circumstances or new information relevant to the project that would result in substantial environmental impacts not identified in the previously approved ND/FONSI. Therefore, a Supplemental ND/FONSI is not necessary.

INTERSTATE ROUTE-710/
FIRESTONE BOULEVARD INTERCHANGE PROJECT

PHASE III - IMPROVEMENTS OVER RIO HONDO CHANNEL

ENVIRONMENTAL REEVALUATION/ADDENDUM

CITY OF SOUTH GATE
AND
CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)
AND
FEDERAL HIGHWAY ADMINISTRATION

NOVEMBER 2003

TABLE OF CONTENTS

TABLES

ATTACHMENTS

D. Right-of-Way Requirements
E. Site Photos
F. Air Quality Assessment
G. Biological Constraints Survey
H. Initial Site Assessment
I. Preliminary Hydraulics Impacts Memorandum
J. Acoustical Assessment Protocol
K. Traffic Study
L. Environmental Significance Checklist

ENVIRONMENTAL REEVALUATION/ADDENDUM

NEGATIVE DECLARATION/FINDING OF NO SIGNIFICANT IMPACT
I-710/FIRESTONE BOULEVARD INTERCHANGE PROJECT
PHASE III - IMPROVEMENTS OVER RIO HONDO CHANNEL

SCH No. 1996101004
November 2003

I. PROJECT TITLE

Negative Declaration/Finding of No Significant Impact
I-710/Firestone Boulevard Interchange Project
Phase III - Improvements Over Rio Hondo Channel

This is a reevaluation of the Negative Declaration/Finding of No Significant Impact (ND/FONSI) prepared for the I-710/Firestone Boulevard Improvements Over Rio Hondo Channel. The reevaluation addresses minor design modification from the design concept addressed in the June 1997 Project Report. The project is located in the City of South Gate, in Los Angeles County, California. A Vicinity Map is shown in Attachment A and Proposed Improvements are shown in Attachment B. The ultimate interchange, as shown in the approved ND/FONSI, is provided in Attachment C for Phase I, II and III.

II. PROJECT DESCRIPTION

The approved ND/FONSI addressed the construction of the I-710/Firestone Boulevard Improvements Over Rio Hondo Channel Phase III project, in the City of South Gate, County of Los Angeles.

Existing Rio Hondo Channel

The Rio Hondo Channel is located near the eastern limits of the City of South Gate, see Attachment A for the project location map. The existing bridge is a twelve (12) span structure that spans over the Rio Hondo Channel with an average span length of 12.2 meters (m) (40 feet [ft]) long, and a total span of 146.30 m (480 ft). The existing structure consists of steel girder members with concrete deck, with a raised concrete sidewalk and pilaster barrier rails along both sides of the structure. Firestone Boulevard traverses the Rio Hondo Channel with two (2) westbound lanes and two (2) eastbound lanes widening to three (3) lanes for a portion of the crossing and merging to two (2) lanes past the crossing towards the City of Downey. The existing bridge width between the curbs is 16.46 m (54 ft), striped for a total of five (5) travel lanes.

Proposed Project

The 1996 Initial Study/Environmental Assessment (IS/EA) included in the Project Report (PR), addressed a multi-phase project. The currently proposed improvements represent Phase III of the ultimate interchange project, with Phase IV to be implemented in the future. This environmental reevaluation addresses implementation of the Phase III improvements with respect to modifications to applicable environmental regulations since approval of the IS/EA on September 13, 1996. This environmental reevaluation specifically focuses on Phase III: Widening of the Rio Hondo Channel Bridge. The 1996 IS/EA indicates that the Rio Hondo Channel bridge would be widened to provide three (3) through travel lanes in each direction on Firestone Boulevard. The following are changes as compared from the original project as described in the Project Report (PR) dated June 1997.

1. Bridge deck rehabilitation to repair numerous cracks and spalling.

2. Seismic retrofit of the bridge.

3. Acquisition of 3.04 m (10 ft) of (ROW) on both sides of Firestone Boulevard (refer to Attachment D, *Right-of-Way Requirements*, and Table 1, below).

4. Reconstruct the bike lane at the east end of the bridge to maintain the existing vertical clearance.

5. Existing access road to the west of the bridge will be reconstructed to maintain the existing vertical clearance.

6. Aesthetic treatment and fencing will be incorporated into the bridge rail.

7. Western approach improvements extending to South Gate City limits.

8. Utility relocations of a 0.3 m (12 in) waterline and telephone communication duct bank.

Table 1
Phase III Right-of-Way Requirements

Assessor Parcel Number (APN)	Use of Property	Area Required (square feet)	Structure/Parking Impacted?
6232-004-008	Store Building	1,075 sf	No
6232-004-007	Warehouse	1,348 sf	No
6232-004-901	Rio Hondo Channel	3,490 sf	No
6232-004-018	Warehouse	708 sf	No
6232-005-806	Utilities	2,750 sf	No
6232-005-005	-	606 sf	No
6232-007-022	Auto Repair	535 sf	No
6232-007-024	-	2,015 sf	No
6232-007-023	-	57 sf	No
6232-007-906	-	3,350 sf	No
6232-007-800	-	400 sf	No
6232-007-802	-	2,515 sf	No
6231-008-014	Auto Repair	379 sf	No

III. PREVIOUS ENVIRONMENTAL ACTION

The Project Report for the I-710/Firestone Boulevard Interchange project was approved by the State of California Department of Transportation (Caltrans) on June 11, 1997. All documentation and analysis within the PR addressed the ultimate construction of the interchange, including adjacent arterial improvements, and an approach to staged implementation. An IS/EA was prepared on September 13, 1996, for the I-710/Firestone Boulevard Improvements including improvements to the existing Firestone Boulevard bridge over the Rio Hondo Channel. Based on the IS/EA, a ND was approved by Caltrans on March 27, 1997 and a FONSI was approved by the Federal Highway Administration (FHWA) on April 1, 1997.

IV. ENVIRONMENTAL EVALUATION AND MITIGATION MEASURES FOR PHASE III

Background

Caltrans is the Lead Agency under the California Environmental Quality Act (CEQA) and the City of South Gate is the project proponent. This Environmental Reevaluation/Addendum is based on the ND/FONSI for the I-710/Firestone Boulevard Improvements approved by Caltrans and FHWA in March and April 1997, and is intended to satisfy and reaffirm both CEQA and NEPA requirements.

The environmental conditions in which the project will be implemented will not be significantly impacted by the proposed project. To accommodate roadway widening, approximately 3.04 m (10 ft) of commercial and Los Angeles Flood Control District (LACFCD) ROW on each side of Firestone Boulevard will be acquired. The proposed project will not require acquisition of properties or structures, displacement of residents or tenants (other than relatively minor "sliver" acquisitions, along adjoining commercial properties). Attachment E contains Site Photographs.

Reevaluation Criteria

In accordance with CEQA, NEPA and Caltrans policies, this Environmental Reevaluation/Addendum examines the potential for substantial changes in impacts mitigation measures or alternatives due to any of the following: 1) significant project revisions; 2) substantial new information, or 3) changes in environmental laws or policies.

New Circumstances/New Information

The following provides the environmental evaluation for the proposed project modifications. Explanations are provided for each item below. The environmental analysis contained herein considers potential environmental impacts including areas outside of the State's jurisdiction within the City of South Gate.

Aesthetics

The previous IS/EA did not indicate any significant aesthetic impacts and the proposed modifications will not affect any aesthetic issues not already addressed in the previous environmental document. The proposed improvements will not result in a change in the vertical profile of the existing bridge structure. Furthermore, the project area is located in the eastern portion of the City within a highly developed urban setting with commercial and industrial uses. However, aesthetic treatment and fencing will be incorporated into the bridge rail to provide a uniform and consistent look with the surrounding area.

Agricultural Resources

The project site is located within a fully developed urban setting. Parcels in the project vicinity are paved, developed and occupied with industrial and commercial uses. No agricultural uses exist within the project site vicinity.

Air Quality

An Air Quality Assessment was prepared by RBF Consulting dated July 2003 to identify potential air quality impacts (refer to Attachment F). The proposed project is located within the South Coast Air Basin (SoCAB), which includes Orange County and the non-desert portions of Los Angeles,

Riverside and San Bernardino Counties. Air quality conditions in the Basin are under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Despite implementation of strict controls, the Los Angeles portion of the Basin still fails to meet both Federal and State air quality standards for ozone (O_3) and particulate matter (PM_{10}). The Basin is still non-attainment for Federal Carbon Monoxide (CO) attainment status for the Basin. Furthermore, the SCAQMD no longer identifies degrees of non-attainment for criteria pollutants.

Air Quality Conformity Analysis

Federal transportation funding for the project is programmed in SCAG's adopted *2002 Regional Transportation Improvement Program* (RTIP) for fiscal year FY 2002/2003 - 2007/2008 and is described (in verbatim) as follows (refer to Attachment F for a copy of SCAG's RTIP page that identifies the proposed improvements):

> *NCR36 - Widen Firestone Blvd Bridge over the Rio Hondo Channel and minor street widening between the bridge and Garfield Avenue.*

Federal regulations (40 CFR 93.109) stipulate that determination of conformity with a State or Federal Implementation Plans (SIP or FIP) be made for a project that involves federal funding. A determination as to whether the project will produce new air quality violations or increase existing air quality violations is required for a project that is not exempt from the regulations. Code of Federal Regulations Section 40 CFR 93.126 (Table 2) identifies the type of projects that are exempt from the conformity requirement. The project is included in the RTIP and the conformity with associated analysis is part of the Federal Transportation Improvement Program (FTIP) approval process.

The Final EIR for the City's General Plan included a complete evaluation of air quality for build-out of the City including transportation improvements. The proposal project is designed as a mitigation component of I-710, and is planned to reduce congestion. Additionally, the Final EIR for the city's General Plan identified measures to reduce air quality impacts including transportation system management techniques, such as re-striping, spot widening, and traffic signal coordination to maximize the capacity of the existing and planned traffic system. The project will not result in any new air quality violations nor increase existing air quality violations from what was previously accounted for in the AQMP and SIP. The project complies with the City's General Plan as well as the SIP and EPA Conformity requirements.

Short-Term Impacts

Temporary construction activities associated with the proposed project are short-term and would last the duration of project construction. A quantitative construction emissions analysis has concluded that project construction would not create adverse pollutant emissions. Temporary emissions resulting from construction activities include CO, NO_X, ROC, and PM_{10}. Contributing factors to emissions include stationary and mobile powered on-site equipment, trucks, rollers, backhoes, pavers, scrapers, material delivery trucks, and worker vehicles to and from the project site.

Short-Term Impacts

Temporary construction activities associated with the proposed project are short-term and would last the duration of project construction. A quantitative construction emissions analysis has concluded that project construction would not create adverse pollutant emissions. Temporary emissions resulting from construction activities include CO, NO_X, ROC, and PM_{10}. Contributing factors to emissions include stationary and mobile powered on-site equipment, trucks, rollers, backhoes, pavers, scrapers, material delivery trucks, and worker vehicles to and from the project site.

Table 2
Total Daily Construction Emissions

Emission Source	Pollutant (lbs/day)[1]			
	ROC	NO_X	CO	PM_{10}
Unmitigated Construction Emissions	10.47	80.22	78.87	7.50
Mitigated Construction Emissions	10.47	80.22	78.87	4.79
SCAQMD Threshold	75	100	550	150
Is Threshold Exceeded?	No	No	No	No

ROC = Reactive Organic Compounds NO_X = Nitrogen Oxides CO = Carbon Monoxide PM_{10} = fine particulate matter
1 = Emissions calculated using the URBEMIS2002 Computer Model as recommended by the SCAQMD.

Table 2, above indicates that the total daily anticipated project construction emissions would not exceed SCAQMD construction thresholds. Although no exceedance of construction thresholds for criteria pollutants will occur, construction-related emissions would be temporary, and cease upon project completion. To further minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with the state-mandated emission control devices pursuant to state emission regulations and standard construction practices.

Long-Term Impacts

With improved traffic circulation anticipated from the proposed project, air quality is expected to improve over the "no-project" condition. There are no long-term impacts anticipated with implementation of this project. A local CO screening analysis is required to assess the potential for localized concentrations of CO to occur with implementation of the proposed project. The CO screening was conducted in accordance with the Local Analysis Flow Chart presented in Figure 3, *Local CO Analysis* (Section 4.0), of the *Transportation Project-Level Carbon Monoxide Protocol*, revised December 1997. The results of this evaluation are presented below:

Is the projection a CO non-attainment area? The proposed project is located within a Federal CO non-attainment and State CO attainment area with no CO approved maintenance plan.

Was the area re-designed as "attainment" after the 1990 Clean Air Act? According to CARB staff, the SCAB was not re-designed as "Federal attainment" after the 1990 Clean Air Act.

Does the project worsen air quality? The following criteria (as contained in Section 4.7.1 of the *Transportation Project-Level Carbon Monoxide Protocol*) was used to determine whether the proposed project is likely to worsen air quality for the area:

B. Does the project significantly increase traffic volumes? The proposed project will not significantly increase local traffic when compared to the no project condition. Rather, the project will serve to alleviate congestion from Interstate 710.

For intersections, reduction in average speed or an increase in average delay is generally considered as worsening traffic flow. As previously described in the project description above, the proposed bridge widening would not require a change in existing intersection geometry which would effect the existing and forecast deficiencies experienced at the Garfield Boulevard/Firestone Boulevard and Old River School Road/Firestone Boulevard intersections. To further evaluate the anticipated circulation enhancements achieved through project implementation, a mid-block analysis was performed along Firestone Boulevard between El Paseo and Old River School Road. The following summarizes the analysis:

Firestone Boulevard over the Rio Hondo River is currently constructed as a four-lane divided roadway with a painted median, with a capacity of approximately 3,200 vehicles per hour. The proposed project consists of widening Firestone Boulevard over the Rio Hondo River from its current cross-section of four (4) lanes to six (6) lanes with a 3.6 meter (12 ft) median. Thus, the capacity of the roadway would increase from approximately 3,200 vehicles per hour to 4,800 vehicles per hour. Analysis of future (Year 2025) traffic volumes indicates that the capacity of the local roadway network will be exceeded, causing congestion at the existing intersections. The intersection analysis illustrates that year 2025 conditions are the same since no changes in intersection geometry would occur.

A mid-block analysis was conducted along Firestone Boulevard at the Rio Hondo River which indicated that under year 2025 conditions this segment is forecast to operate at a deficient LOS (LOS F) without project conditions for weekday a.m. and p.m. peak hours according to City of South Gate performance criteria. The analysis demonstrates that future mid-block conditions with project are somewhat improved when compared to the forecast year 2025 without project scenario (LOS D for a.m. peak hour and LOS E for mid-day peak). This represents a minor LOS enhancement versus the future without project condition. The p.m. peak hour LOS, however, remains at LOS F under the future with project scenario.

C. Is the project suspected of resulting in higher CO concentrations than those existing within the region at the time of attainment demonstration? Review of the South Coast AQMP indicates that no attainment demonstration plan for CO has been prepared. The SoCAB is currently in CAAQS attainment for CO and CO non-attainment for NAAQS.

D. Does the project involve a signalized intersection at LOS E or F? Currently, the Firestone Boulevard/Garfield Avenue and Firestone Boulevard/Garfield Avenue intersections operate at a deficient LOS (LOS E or worse) according to City of South Gate performance criteria. Forecast year 2025 without project traffic volumes were derived by applying an annual growth rate factor of 1.5-percent to existing traffic volumes to account for twenty-two years of ambient traffic growth.

E. Does the project affect a signalized intersection worsening its LOS E or F? It should be noted that the proposed bridge widening would not require a change in existing intersection geometry which would effect the existing and forecast deficiencies experienced at the Garfield Boulevard/Firestone Boulevard and Old

River School Road/Firestone Boulevard intersections. Since the project only effects capacity on the segment of Firestone Boulevard over the Rio Hondo River and not the study intersections themselves, forecast year 2025 with project conditions are identical to forecast year 2025 without project conditions with respect to intersection operation. Therefore, per the screening protocol, a detailed microscale Carbon Monoxide Hotspots analysis is not required.

Biological Resources

As stated in the previous IS/EA, the Rio Hondo Channel is a concrete channel with grouted rip-rap sides. The document further states that no birds or other wildlife were observed during a field visit of the site. The Rio Hondo Channel is concrete lined and possess little or no value for native wildlife species.

A Biological Constraints Survey was conducted by BonTerra Consulting in July 2003 to identify any areas of concern (refer to Attachment G). The survey included biological literature searches to identify special status plants, wildlife, and habitats known to occur in the project vicinity. The search included the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001), U.S. Fish and Wildlife Service (USFWS) special status species publication, the California Department of Fish and Game (CDFG), and the CDFG's California Natural Diversity Database. The project site is an urban environment and the Rio Hondo River is a concrete channel. Vegetation is limited and consists of an ornamental green belt and a ruderal (weedy) field within a power line easement. As such, the vegetation is of little biological value and minimization measures for any impacts, although expected to be minimal, are not warranted. The ornamental and ruderal vegetation adjacent to Firestone Boulevard provides limited resources for nesting birds. Nesting is not expected close to the existing road due to the high level of disturbance present. However, to comply with the Migratory Bird Treaty Act, minimization and avoidance pre-construction measures will be deployed by the City of South Gate for bats, swallows, and swifts. Although no evidence of any substantial nest colony of birds or bats was detected during the surveys, by the construction date these species could potentially occupy the project area to roost or nest. Therefore, pre-construction surveys will continue to occur for the bat to verify the species is not present on or within the bridge structure. If no bats are observed to roost on the project site, then no exclusion measures are needed. In addition, two (2) weeks prior to initiation of construction activities, focused nesting bird surveys will be conducted for swallows and swifts. A full list of plant and wildlife species is included in Table 3, below:

Table 3
Plant and Wildlife Species

Plant Species	
Wild Oat	*Avena fatua*
Mule Fat	*Baccharis salicifolia*
Black Mustard	*Brassica nigra*
Tree Tobacco	*Nicotiana glauca*
Russian Thistle	*Salsola tragus*
Mexican Elderberry	*Sambucus mexicana*
California Sage	*Artemisia californica*

Big Sagebrush	*Artemisia tridentata*
Coyote Brush	*Baccharis pilularis*
Carmel Ceanothus	*Ceanothus griseus*
California Buckwheat	*Eriogonum fasciculatum*
Western Sycamore	*Plantanus racemosa*
White Sage	*Salvia apiana*
Black Sage	*Salvia mellifera*
Ornamental pine	*Pinus sp.*
Jacaranda	*Jacaranda mimosifolia*
California Fan Palm	*Washingtonia filifera*
Telegraph Weed	*Heterotheca grandiflora*
Castor Bean	*Ricinum communis*
Mediterranean Schismus	*Schismus barbatus*
filaree	*Erodium cicutarium*
Cheeseweed	*Malva parviflora*
Wildlife Species	
Rock Dove	Columba livia
Mourning Dove	Zenaida macroura
American Crow	Corvus brachyrhynchos
Northern Rough-winged Swallow	Stelgidopterx serripennis
Cliff Swallow	Hirundo pyrrhonota
European Starling	Sturnus vulgaris
House Finch	Carpodacus mexicanus
Western Fence Lizard	Sceloporus occidentalis
Side-blotched Lizard	Uta stansburiana
Oppossum	Didelphis virginianus
House Mouse	Mus musculus
Raccoon	Procyon lotor

Special Status Plant Species

Southern Tarplant (*Centromadia parryi ssp. australis*)

Special Status Plant Species that has a potential to occur in the project area is the Southern Tarplant (*Centromadia parryi ssp. Australis*), a CNPS List 1B species that blooms between June and November. It is known to occur in marshes, swamps, estuary margins, and vernal pools throughout Los Angeles, Orange, Santa Barbara, and San Diego Counties. The southern tarplant

was not observed during the survey but has a low potential to occur within the power line easement and some ruderal areas along the Rio Hondo.

Special Status Wildlife Species

Special Status Wildlife Species that have a potential to occur in the project area include the western burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris actia*), and the loggerhead shrike (*Lanius ludovicianus*).

Western Burrowing Owl (Athene Cunicularia)

The western burrowing owl is a federal Species of Concern and a State Species of Special Concern, widespread throughout the western United States. The western burrowing owl has a low potential to occur in the project area.

California horned lark (*Eremophila alpestris actia*)

The California horned lark is designated as a California Species of Special Concern and is known to be locally common in the region. Based on field surveys and general environment of the site, the California horned lark has a low potential to occur in the power line easement of the project area.

Loggerhead Shrike (*Lanius ludovicianus*)

The loggerhead shrike is designated as a Federal Species of Concern and a California Species of Special Concern, fairly common in the lowlands and foothills of southern California. The loggerhead shrike has a low potential to occur in the power line easement of the project area.

The southern tarplant and the western burrowing owl may meet the criteria as Rare or Endangered in Section 15380 of CEQA. Upon a second, further detailed field visit, neither the southern tarplant, or the western burrowing owl were observed in the non-native grasslands of the project vicinity. The survey concludes that the southern tarplant and the western burrowing owl are considered to be absent from the project site.

Invasive Species

If any landscaping is proposed for the proposed project, then it must be consistent with Executive Order 13112 on Invasive Species. This order states that the introduction of invasive species should be prevented and that a federal agency should not authorize, fund or carry out actions that may promote the introduction or spread of invasive species. Landscape designs will be submitted for review and approval by a qualified biologist. The review will determine that no invasive, exotic plant species are to be used in any proposed landscaping, and that suitable substitutes are proposed.

Jurisdictional Impacts

The Rio Hondo Flood Control facility at Firestone Boulevard is a concrete trapezoidal channel. Construction within the channel will be subject to approval by the ACOE through the 404 permit process, the CDFG 1601 Streambed Alteration program and a 401 Water Quality Certification from the RWQCB. The bridge widening is anticipated to require an extension of the existing pier walls and debris nose walls to support the new structure widening. Approximately 0.15 ac of non-vegetated jurisdictional waters regulated by the ACOE and CDFG would be permanently impacted with the implementation of the bridge widening over the Rio Hondo Channel. Based on the amount

of jurisdictional impacts, it is anticipated that the proposed improvements can be authorized via Nationwide Permit (NWP) 14, *Linear Transportation Projects* and NWP 33, *Temporary Construction, Access, and Dewatering*. Due to the fact that no wetland or riparian habitat is present, no significant or adverse impacts are anticipated. This was further verified through recent correspondence with the CDFG and ACOE staff. Both agencies indicated, due to the existing channelized condition of the Rio Hondo in the project vicinity, no compensatory mitigation is required.

Cultural Resources

As indicated in the previous IS/EA, the project site is fully developed within an urban setting with industrial and commercial uses surrounding the project area. Implementation of the proposed project would not cause a substantial adverse change in the significance of a historical, archaeological, or unique paleontological resource. A literature records search was provided by the South Central Coastal Information Center, University of California, Los Angeles, that concluded that the project area and bridge structure does not contain any structures or resources eligible for the National Register of Historic Places (NRHP). Furthermore, the Caltrans Structure Maintenance and Investigations, Historical Significance List indicates that the Rio Hondo structure is designated as Historical Significance Category 5 - Not eligible for NRHP.

Geology and Soils

There are no known earthquake faults within the City's boundaries. As indicated in the Hazards Management Element of the General Plan, surface rupture is considered to be a low level of risk within the City. Furthermore, the California Division of Mines and Geology (CDMG) Special Publication 42 (revised 1997, supplemented 1999) indicates that no known Alquist-Priolo Earthquake Fault Zones (EFZs) exist within the City of South Gate.

There are no active or potentially active faults that are known to traverse the City, however, there are a number of active faults in the vicinity of the project site capable of producing earthquakes that could affect the proposed project area. Major faults closest to the site include the San Andreas, Whittier Elsinore, Newport-Inglewood, and Hollywood Faults. The seismic risk of the area is considered high based on the proximity of these known active faults. However, no seismic hazards have been identified which suggest the project site is exposed to more potential damage from seismic events than the rest of southern California. No severe geological hazards or constraints have been found which would preclude implementation of the proposed project, however, portions of the existing Rio Hondo Channel structure will undergo a seismic retrofit to conform to the latest seismic design criteria.

Hazards and Hazardous Wastes

According to the 1996 IS/EA soil contamination was located east and west of I-710 west of Garfield Avenue and north of Firestone Boulevard, primarily near the ARCO Vinvale western property. No contamination or hazardous wastes was recorded or located on or near the Rio Hondo Channel vicinity. Furthermore, an Initial Site Assessment (ISA) was conducted by RBF Consulting dated June 25, 2003 to identify the potential for hazardous materials/wastes to be present with the proposed project (refer to Attachment H). A visual site investigation was conducted which revealed no physical evidence to suggest the existence of surface hazardous materials within the boundary of the project site.

The ISA concludes that two (2) regulatory sites have reported subsurface contamination which has impacted groundwater. The following provides a detailed summary relative to the current property

status:

The ARCO Vinvale facility located on the east side of the I-710 and north of Firestone Boulevard was identified in the previous ISA conducted in 1993 for the I-710/Firestone Boulevard Interchange improvements. The site was reported as having a potential to impact the proposed improvements due to releases of fuel which has caused soil and groundwater contamination at the facility. RBF interviewed Mr. David Hung with the Los Angeles RWQCB on June 25, 2003, to confirm the closure status of the ARCO Vinvale facility. According to Mr. Hung, a closure status has been granted by RWQCB.

The ARCO service station (#5110) is located east of the I-710 interchange on the north west corner of Firestone Boulevard/Garfield Avenue. The site is identified as a Leaking Underground Storage Tank (LUST) site where groundwater contamination has been reported. Based on the Final Site Investigation (SI) Report for the I-710/Firestone Boulevard Interchange, dated May 24, 1996, groundwater has migrated beyond the boundaries of the ARCO facility into the area of the existing I-710 interchange and easterly to approximately Garfield Avenue. Closure has not been granted by the appropriate regulatory agency for this property. Although remedial activities are currently in progress on this property, the actual extent of groundwater contamination beyond that reported in the 1996 SI Report could not be confirmed through interviews conducted with the RWQCB. Therefore, the extent of contamination is assumed to be similar to the limits delineated in the 1996 IS/EA for the I-710/Firestone Boulevard Interchange project. As such, ARCO Station #5110 represents a potential off-site source of contamination potentially affecting the western project limits near Garfield Avenue.

Furthermore, Mr. Steve Chan of Caltrans was contacted during the ISA, regarding whether an assessment of aerially deposited lead (ADL) is appropriate for the proposed project. Mr. Chan stated ADL is not required due to the fact the project is located entirely outside of Caltrans ROW.

The ISA recommends implementation of the following measures identified in the 1996 SI Report prepared by IWA Engineers, given the proximity of the proposed improvements tot he known contamination associated with ARCO Station #5110. These measures should be deployed if construction activities require excavation, trenching, and/or if groundwater is anticipated to be encountered in the vicinity of Garfield Avenue:

1. Visual observations and measuring organic vapor concentrations using field instruments should occur while subsurface construction activities are taking place. In addition, a Site Safety Plan (SSP) specific to planned excavation and construction activities should be prepared for use by construction field crews and emergency response agencies.

2. Underground fuel pipelines within the project area should be clearly delineated and caution used during construction activities in the vicinity of the underground pipelines.

3. Prior to construction activity at the site, ARCO representatives should be contacted to obtain up-to-date information on the status of groundwater remediation activities at the ARCO Station #5110.

The ISA indicates implementation of the proposed improvements may require the removal of yellow paint or thermoplastic traffic stripes, which are known to contain elevated levels of lead and chromium. If removed, during construction activities, the generated wastes must be disposed of at an appropriate permitted disposal facility.

The proposed project would comply with all City of South Gate codes and regulations with regards to emergency response and emergency evacuation. Vehicular traffic will be maintained upon the existing roadways or with street closures with detours around the construction site. Street closures and detour routes would be approved in advance of construction by the City Public Works Department. No revisions to adopted emergency plans would be required as a result of the proposed project. Emergency access will be provided pursuant to all applicable City codes and standards.

Hydrology/Water Quality

Based on a memorandum on hydraulic impacts by Psomas dated July 18, 2003, an assessment of the impacts of the proposed Firestone Boulevard Bridge widening project on the hydraulic design of the Rio Hondo Flood Control Channel was conducted (refer to Attachment I). As a result of the proposed improvements, the hydraulic analysis demonstrated that the depth of flow in the Rio Hondo Channel will increase by less than 0.1 ft. The increase in depth of 0.1 ft will affect the channel from the upstream end of the bridge to a point less than 500 ft upstream in the channel. This proposed increase in depth of flow will be contained in within the channel without encroaching on the County's minimum freeboard requirements for the channel. The memorandum concludes that the impacts of the hydraulic capacity on the Rio Hondo Channel can be considered insignificant.

The Rio Hondo Flood control Channel is tributary to the Los Angeles River. In order to prevent construction related debris and nuisances (i.e., sedimentation, or other construction generated materials) from entering the channel and ultimately entering the Los Angeles River, the proposed project will include temporary erosion control measures. The purpose of these measures are to protect the Rio Hondo Channel and Los Angeles River from debris flowing from the construction area and to avoid impacts to area water resources. Any runoff must fully conform to the current discharge requirements of the Regional Water Quality Control Board (RWQCB) to avoid impacting water quality. Contractor shall fully conform to the requirements of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Storm Water Permit, Order No. 99-06-DWQ, NPDES No. CAS000003, adopted by the State Water Resources Control Board on July 15, 1999, in addition to the Best Management Practices (BMPs) (i.e., silt fencing, sand bags, straw bale dykes, etc.) specified in the Caltrans Storm Water Management Plan (SWMP). When applicable, the Permittee shall also conform to the requirements of the General NPDES Permit for Construction Activities, Order No. 99-08-DWQ, NPDES No. CAS000002, and any subsequent General permits in effect at the time. These permits regulate storm water and non-storm water discharges associated with year-round construction activities.

Please note that project activities should pay extra attention to storm water pollution control during the "Rainy Season" (October 1st – May 1st) and follow the Water Pollution Control BMPs to minimize impact to receiving waters. Measures must be incorporated to contain all vehicle loads and avoid any tracking of materials.

In December 1999, the U.S. Environmental Protection Agency (EPA) finalized the Phase II of the NPDES program. Specifically, urbanized areas with a population of at least 10,000 and with a population density greater than 1,000 per square mile are required to obtain a storm water permit. For construction, the Phase II Rule requires construction sites disturbing a soil area equal to or greater than 0.4 hectares (ha) (one acre [ac]) and less than 2 ha (5 ac) to control pollutants in storm water runoff.

The Contractor will develop, implement, and maintain a Storm Water Pollution Prevention Plan (SWPPP) conforming to the requirements of the Caltrans Specification Section 7-1.01G "Water

Pollution Control", Caltrans Statewide NPDES Permit, the General NPDES Permit for Construction Activities, and the Caltrans Storm Water Quality Handbooks "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual", and "Construction Site Best Management Practices (BMPs) Manual" effective November 2000, and subsequent revisions. In addition, the SWPPP must conform to the requirements of the SWRCB Resolution No. 2001-046, the Sampling and Analytical Procedures (SAP) Plan. It should also be noted that the RWQCB may require a dewatering permit for groundwater that may be impacted during project construction.

Deployment of standard construction measures as stipulated in the Caltrans statewide NPDES permit will serve to reduce construction-related water quality impacts to less than significant levels.

In general, introduction of new roadway surfaces may cause adverse impacts on surface and groundwater by: (1) increasing the load of constituents generated by vehicular use and human activities in a watershed, and (2) reducing the amount of water that percolates into the soil. An increase in impervious surface decreases the amount of water that infiltrates into the ground and consequently increases the amount of runoff to waters. Roadway projects are also a potential source of a variety of pollutants to surrounding surface and subsurface waters. Storm water runoff pollutants generated by use of roadways generally include: nutrients, metals, particulates, and gross pollutants (trash). Table 4 lists expected pollutants in runoff from roadways.

Table 4
Pollutants in Storm Water Runoff - Roadways

Constituents - Roadway Runoff	
TSS	Dissolved Copper
No_3N	Dissolved Zinc
TKN	Dissolved Lead
Ortho-phosphate	Particulate Copper
Particulate Phosphorus	Particulate Zinc
	Particulate Lead

Measures may be implemented to mitigate for the increase in runoff and reduction of storm water runoff pollutants generated by roadway projects. Implementation of water quality treatment Best Management Practice (BMP) devices will reduce the concentrations of pollutants to downstream receiving waters. Post construction BMPs applicable to roadway projects may include, but not limited to the installation of:

- Extended Detention Basins (EDB)
- Infiltration Basins
- Biofiltration (Vegetated) Strips/Swales
- Drain Inlet Inserts

The following table summarizes expected removal efficiencies (% reduction of various pollutants) for various BMPs applicable to interchange/highway projects.

Table 5
BMP Pollutant Removal Efficiencies

BMP	TSS %	Total Cu %	Total Zn %	Total Pb %	Nox %	TP %
Extended Detention Basin	78	87	85	81	34	73
Biofiltration Swales	73	89	91	83	32	55
Biofiltration Strips	83	94	91	93	10	3
Drain Inlet Inserts	<10	<10	<10	<10	<10	<10
Notes: Removal Efficiencies based on published and unpublished recent research studies.						

Prior to commencement of project construction, the City will coordinate with the District storm water coordinator and identify appropriate construction control measures. Such measures will be derived from the *Caltrans Storm Water Quality Handbook, Project Planning and Design Guide*, dated September 2002.

Overall BMP selection and sighting is being defined based on the evaluation of existing site constraints, constituents of concern at the receiving waters, soil conditions, and hydraulic conditions. Deployment of BMPs noted above, or any combination thereof, would serve to reduce long-term water quality impacts due to implementation of the proposed project. Thus, significant water quality impacts are not anticipated.

Land Use Planning

The project site is located within a fully developed urban setting with parcels in the project area developed and occupied with commercial, and retail uses. The proposed widening of the Rio Hondo Channel is Phase III of a four (4) phase project and as noted in the Project Report dated June 1997, the project has been approved by Caltrans and the City of South Gate. Although minor "sliver" acquisitions are necessary to support the proposed bridge widening, the ROW needs of the project would not require the acquisition or displacement of business establishments or parking.

Mineral Resources

The project vicinity is located in a predominantly developed area of eastern South Gate. The City of South Gate General Plan indicates that the soils do not contain any known mineral resources and there are no designated mineral resource areas within the City.

Noise

An Acoustical Screening Analysis was prepared by RBF Consulting on June 26, 2003, which indicates that the proposed project is considered a Type I project as defined by 23 CFR 772. A Type I project is defined as follows: *A proposed Federal or Federal-aid highway project for the construction of a highway on a new location, or the physical alteration of an existing highway which significantly changes either the vertical alignment, or increases the number of through-traffic lanes.*

Based upon the Traffic Noise Analysis Protocol (TNAP) screening procedure, the proposed project fails to meet criteria "A" of the screening protocol (refer to Attachment J):

> *Determine if there are potentially impacted receivers. If there are no impacted receivers, no further analysis will be necessary.*

As mentioned previously, the proposed project is situated within a developed urban setting, east of I-710. The subject portion of Firestone Boulevard is surrounded by commercial and light industrial uses. No outside dining areas are present along the limits of the proposed project. Per TNAP, noise abatement is normally not considered reasonable for commercial areas. As such, the proposed project would not create an impact to any receptors due to the type of existing land uses present within the project limits.

Construction-Related Noise Impacts

Project construction will require a concentrated effort by a contractor, using a variety of equipment such as dozers, backhoes, compaction equipment, pile drivers (for concrete piles), cranes, concrete and asphalt paving equipment, and large trucks. It is anticipated that construction hours would be restricted and thus both night and weekend construction would be limited. Potential noise impacts that would result from project construction would primarily be short-term. Construction-related impacts include temporary increases in noise levels as a result of site preparation and construction of the proposed improvements.

Noise produced by construction equipment varies substantially depending upon the type of equipment being used, and its operation and maintenance. Construction noise is generally of relatively short duration, lasting from a few days to a period of months. Noise impacts associated with construction activities would typically occur in several distinct phases, each with its own noise characteristics. The first phase, site preparation, is generally the noisiest and has the shortest duration. Activities that occur during this phase for this project include pile driving. Noise levels typically range from 73 to 96 dBA at 15 m (50 ft) from individual pieces of equipment.[1] However, given the lack of sensitive uses in the vicinity of the bridge structure, pile driving vibration impacts are not anticipated to be significant.

Construction truck traffic will likely access the sites using I-710 and Firestone Boulevard and will not be routed through any residential areas. In addition, temporary construction vehicle noise on-site and traffic noise along access routes to the site from the movement of equipment and workers onto the site would occur. The major pieces of heavy equipment are expected to be moved on to the site once during construction then staged on-site or on adjacent parcels. Thus, heavy equipment transport noise would be minimized.

According to the Caltrans TNAP, "construction noise is only substantial in exceptional cases". Short-term construction noise during construction of the proposed roadway improvements would result in an increase in ambient noise levels within the vicinity of the proposed project. However, due to the lack of sensitive receptors in the project vicinity, construction-related noise impacts are not considered to be adverse. Not withstanding this, construction activities shall comply with the City of South Gate General Plan Noise Element related to construction noise. Construction activities are prohibited between the hours of 7:00 p.m. and 7:00 a.m., and shall not occur during City-recognized public holidays.

The analysis further concludes that construction noise would last the duration of construction, although it would be the most noticeable during initial construction. These impacts, however, would be short-term and cease upon completion of construction. No sensitive receptors (i.e., residents, schools, churches, hospitals, convalescent/retirement homes) are located along Firestone Boulevard within or immediately adjacent to the project limits. As such, short-term construction noise impacts are not considered significant or adverse.

---

[1] United States EPA, 1971.

Furthermore, the biological constraints survey indicates that the proposed project is located in an urban environment with noise associated with urban areas and since no biological resources of importance were identified during the surveys, no minimization measures are required.

Population and Housing

Implementation of the proposed project would not have any impacts with population and housing as no residential units is anticipated as a result of the project. Short-term construction may create a new source of employment, however, would be temporary in nature and long-term operations would be limited to minor maintenance and repairs.

Public Services

The widening of the Rio Hondo Channel is not expected to impact public services including fire protection, police protection, schools, parks or other public facilities. As mentioned above, emergency access will be provided pursuant to all applicable City codes and standards. Associated street closures and detour routes would be approved in advance of construction by the Public Works Department. The proposed project would enhance the operation of Firestone Boulevard, as a result the delivery of public services (bus service, waste disposal, police and fire protection, public transit and emergency medical response) is expected to improve, thus producing a positive effect.

Recreation

There are no anticipated impacts to recreation or recreational facilities in the area, as no such facilities currently exist in the project area. The existing bike lane along Firestone Boulevard in the vicinity of the bridge will be temporarily reduced during project construction. The bike lane will be clearly signed to direct bicyclists around the construction area. The temporary detours would not substantially impair the capability of the bike lane to perform its vital function.

Transportation/Traffic

The previous 1996 IS/EA does not specifically address issues related to the Rio Hondo Channel. However, temporary disruptions of traffic during construction would result along Firestone Boulevard. Furthermore, the City of South Gate will be required to periodically provide traffic control assistance, particularly when temporary or over-night closures are implemented.

A Traffic Impact Study was completed by RBF Consulting dated July 2003 to update existing and future traffic conditions in the project study area (refer to Attachment K). This analysis evaluates existing and forecast future year conditions of Firestone Boulevard over the Rio Hondo River. In forecast year 2025, Firestone Boulevard over the Rio Hondo Channel is examined assuming its current four-lane cross-section as well as its proposed six-lane cross-section. The City of South Gate target for roadway segment operation is LOS D or better (V/C of 0.90 or lower).

Existing Roadway Segment Analysis

Firestone Boulevard over the Rio Hondo Channel is currently constructed as a four-lane divided roadway with a painted median, with a capacity of approximately 3,200 vehicles per hour. Table 6 summarizes the existing weekday roadway segment V/C ratio and corresponding LOS during the weekday a.m., mid-day, and p.m. peak hours.

Table 6
Existing Firestone Boulevard Weekday Peak Hour V/C & LOS

Roadway Segment	AM Peak V/C - LOS	Mid-day Peak V/C - LOS	PM Peak V/C - LOS
Firestone Blvd. Over Rio Hondo Channel	**0.91 - E**	**1.05 - F**	**1.24 - F**
Note: Deficient roadway segment operation shown in bold.			

As shown in Table 6, Firestone Boulevard over the Rio Hondo Channel is currently operating at a deficient LOS (LOS E or worse) during the weekday a.m., mid-day, and p.m. peak hours according to City of South Gate performance criteria. Table 7 summarizes the existing weekend-day roadway segment V/C ratio and corresponding LOS during the weekend-day a.m., mid-day, and p.m. peak hours.

Table 7
Existing Firestone Boulevard Weekend-day Peak Hour V/C & LOS

Roadway Segment	AM Peak V/C - LOS	Mid-day Peak V/C - LOS	PM Peak V/C - LOS
Firestone Blvd over Rio Hondo Channel	0.79 - C	**1.10 - F**	**1.06 - F**
Note: Deficient roadway segment operation shown in bold.			

As shown in Table 7, Firestone Boulevard over the Rio Hondo Channel is currently operating at a deficient LOS (LOS E or worse) during the weekend-day, mid-day, and p.m. peak hours according to City of South Gate performance criteria.

Forecast Year 2025 Without Project conditions Roadway Segment Analysis

This analysis assumes Firestone Boulevard over the Rio Hondo Channel is constructed as a four-lane divided roadway with a painted median, with a capacity of approximately 3,200 vehicles per hour for forecast year 2025 without project conditions. Table 8 summarizes the forecast year 2025 without project conditions roadway segment V/C ratio and corresponding LOS during the weekday a.m., mid-day, and p.m. peak hours.

Table 8
Forecast Year 2025 Without Project
Firestone Boulevard Weekday Peak Hour V/C & LOS

Roadway Segment	AM Peak V/C - LOS	Mid-day Peak V/C - LOS	PM Peak V/C - LOS
Firestone Blvd over Rio Hondo Channel	**1.27 - F**	**1.45- F**	**1.72 - F**
Note: Deficient roadway segment operation shown in bold.			

As shown in Table 8, Firestone Boulevard over the Rio Hondo Channel is forecast to operate at a deficient LOS (LOS E or worse) during the forecast year 2025 without project conditions weekday a.m., mid-day, and p.m. peak hours according to City of South Gate performance criteria. Table 9 summarizes the forecast year 2025 without project conditions roadway segment V/C ratio and corresponding LOS during the weekend-day a.m., mid-day, and p.m. peak hours.

Table 9
Forecast Year 2025 Without Project
Firestone Boulevard Weekend-day Peak Hour V/C & LOS

Roadway Segment	AM Peak V/C - LOS	Mid-day Peak V/C - LOS	PM Peak V/C - LOS
Firestone Blvd over Rio Hondo Channel	**1.09 - F**	**1.53- F**	**1.48 - F**
Note: Deficient roadway segment operation shown in bold.			

As shown in Table 9, Firestone Boulevard over the Rio Hondo Channel is forecast to operate at a deficient LOS (LOS E or worse) during the forecast year 2025 without project conditions weekend-day a.m., mid-day, and p.m. peak hours according to City of South Gate performance criteria.

Forecast Year 2025 With Project Conditions

This analysis assumes Firestone Boulevard over the Rio Hondo Channel is constructed as a six-lane divided roadway, with a capacity of approximately 4,800 vehicles per hour for forecast year 2025 with project conditions. Table 10 summarizes the forecast year 2025 with project conditions roadway segment V/C ratio and corresponding LOS during the weekday a.m., mid-day, and p.m. peak hours.

Table 10
Forecast Year 2025 With Project
Firestone Boulevard Weekday Peak Hour V/C & LOS

Roadway Segment	Without Project			With Project		
	AM Peak V/C - LOS	Mid-day Peak V/C - LOS	PM Peak V/C - LOS	AM Peak V/C - LOS	Mid-day Peak V/C - LOS	PM Peak V/C - LOS
Firestone Blvd. Over Rio Hondo Channel	**1.27 - F**	**1.45 - F**	**1.72 -F**	0.84- D	**0.97 - E**	**1.15 - F**
Note: Deficient roadway segment operations shown in bold.						

As shown in Table 10, while Firestone Boulevard over the Rio Hondo Channel is forecast to operate at a deficient LOS (LOS E or worse) during the forecast year 2025 with project conditions weekday, mid-day, and p.m. peak hours according to City of South Gate performance criteria, conditions are substantially improved when compared to the forecast year 2025 without project scenario.

Table 11 summarizes the forecast year 2025 with project conditions roadway segment V/C ratio and corresponding LOS during the weekend-day a.m., mid-day, and p.m. peak hours.

Table 11
Forecast Year 2025 With Project
Firestone Boulevard Weekend-day Peak Hour V/C & LOS

Roadway Segment	Without Project			With Project		
	AM Peak V/C - LOS	Mid-day Peak V/C - LOS	PM Peak V/C - LOS	AM Peak V/C - LOS	Mid-day Peak V/C - LOS	PM Peak V/C - LOS
Firestone Blvd. Over Rio Hondo Channel	**1.09 - F**	**1.53 - F**	**1.48 -F**	0.73 - C	**1.02 - F**	**0.98 - E**
Note: Deficient roadway segment operations shown in bold.						

As shown in Table 11, while Firestone Boulevard over the Rio Hondo Channel is forecast to operate at a deficient LOS (LOS E or worse) during the forecast year 2025 with project conditions weekend-day mid-day and p.m. peak hours according to City of South Gate performance criteria, conditions are substantially improved when compared to the forecast year 2025 without project scenario.

Intersection Capacity Analysis - Forecast Year 2025 With Project Conditions

Since the project only effects capacity on the segment of Firestone Boulevard over the Rio Hondo Channel and not the study intersections themselves, forecast year 2025 with project conditions are identical to forecast year 2025 without project conditions with respect to intersection operation. Refer to Attachment K for a detailed intersection analysis.

Utilities and Service Systems

The existing 12" waterline and communication ductbank on the north side of the structure will be relocated to accommodate the widening of the Rio Hondo Channel. Relocation is not anticipated to result in significant impacts. Regarding the anticipated utility relocation, prior to initiation of project construction activities, the Project Engineer shall coordinate with the affected utility purveyors to establish exact procedures and specifications for any facility to be relocated during construction to verify that the proposed activities will not disrupt services to the community.

Mitigation Measures/Environmental Commitments

Air Quality

AQ1 During clearing, grading, earth moving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures using the following procedures, as specified in the South Coast Air Quality Management Districts Rules and Regulations.

- On-site vehicle speed will be limited to 15 miles per hour.
- All on-site construction roads with vehicle traffic will be watered periodically.
- Streets adjacent to the Project reach will be swept as needed to remove silt that may have accumulated from construction activities so as to prevent excessive amounts of dust.

- All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferable in the late morning and after work is done for the day.

- SCAQMD Rule 403.1, as amended, shall be adhered to, ensuring the proper cleanup of construction related dirt on approach routes to the Project and the application of water and/or chemical dust retardant as directed by the City Engineer. This shall include covering, watering or otherwise stabilizing al inactive soil piles (left for more than 10 days) and inactive graded areas (left for more than 10 days).

- All clearing, grading, earth moving, or excavation activities will cease during periods of high winds (i.e., greater than 35 miles per hour averaged over one hour) so as to prevent excessive amounts of dust.

- All material transported on-site or off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

- The area disturbed by clearing, grading, earth moving, or excavation operations will be minimized so as to prevent excessive amounts of dust.

- These control techniques will be indicated on Project grading plans. Compliance with this measure will be subject to periodic site inspections by the City.

- Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible.

AQ2 Project grading plans shall show the duration of construction. Ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Compliance with this measure will be subject to periodic inspections of construction equipment vehicles by the City.

AQ3 All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

Biological Resources

BIO1. Fourteen (14) days prior to commencement of construction during the breeding season (between February 1 and June 30), the City of South Gate shall retain a qualified biologist to conduct nesting bird surveys for swallows, and swifts within the project area. Any occupied nests encountered during survey efforts shall be mapped on construction plans and avoided until the nest is no longer active as determined by a qualified biologist. Should construction occur after dark, preventative measures shall be taken in an effort to shield strong construction lighting from spilling into adjacent vegetated areas.

BIO2. Pre-construction surveys for roosting bat species are to be conducted by a qualified biologist, prior to construction activities. If bats are observed to roost on the project site, then exclusion measures would be required prior to construction activities. Appropriate exclusion measures would be developed according to the location of the roosting site

and the number of bats present (e.g., use of noise emitters and air horns followed by observations placed in front of roosting locations). The exclusion measures would be repeated once a month until construction activities are completed. Roosting sites, if present on the project site, are not expected to be maternity roosting sites therefore, exclusion measures would not create a significant impact on bat species. These survey methods and exclusion measures would be submitted to the CDFG for approval.

Hazardous Materials

HAZ1. Given the proximity of the proposed improvements to the known contamination associated with ARCO Station #5110, RBF recommends implementation of the following measures identified in the 1996 SI Report prepared by IWA Engineers. Such measures should be deployed if construction activities require excavation, trenching, and/or if groundwater is anticipated to be encountered in the vicinity of Garfield Avenue:

- Visual observations and measuring organic vapor concentrations using field instruments should occur while subsurface construction activities are taking place. In addition, a Site Safety Plan (SSP) specific to planned excavation and construction activities should be prepared for use by construction field crews and emergency response agencies.

- Underground fuel pipelines within the project area should be clearly delineated and cautioned used during construction activities in the vicinity of the underground pipelines.

- Prior to construction activity at the site, ARCO representatives should be contacted to obtain up-to-date information on the status of groundwater remediation activities at the ARCO Station #5110.

HAZ2. Implementation of the proposed improvements may require the removal of yellow paint or thermoplastic traffic stripes, which are known to contain elevated levels of lead and chromium. If removed, during construction activities, the generated wastes must be disposed of to an appropriate permitted disposal facility.

Hydrology/Water Quality

WQ1. The Contractor shall develop, implement, and maintain a Storm Water Pollution Prevention Plan (SWPPP) conforming to the requirements of the Caltrans Specification Section 7-1.01G "Water Pollution Control", Caltrans Statewide NPDES Permit, the General NPDES Permit for Construction Activities, and the Caltrans Storm Water Quality Handbooks "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual", and "Construction Site Best Management Practices (BMPs) Manual" effective November 2000, and subsequent revisions. In addition, the SWPPP must conform to the requirements of the SWRCB Resolution No. 2001-046, the *Sampling and Analytical Procedures (SAP) Plan.*

Noise

N1. Construction activities shall be prohibited between the hours of 7:00 p.m. and 7:00 a.m., and shall not occur during City-recognized public holidays.

Traffic

TRF1. Short-term mitigation to roadway use shall be mitigated by a Traffic Management Plan (TMP) to be established by the City prior to construction of any improvements. This Plan shall consist of prior notices, adequate sign-posting, detours, phased construction and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (prior notices, sign-posting, detours, etc.) as determined appropriate by the City Engineer. Adequate access shall be provided at all times to adjacent uses. Proper detours and warning signs shall be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

Bikeways

B1. The City shall provide appropriate signage and detours to facilitate safe, unrestricted pedestrian and bicycle movements in the project area during the duration of project construction activities. Upon completion of construction the existing pedestrian/bicycle path along the Rio Hondo Channel shall be returned to pre-project conditions.

Environmental Checklist

The environmental significance checklist prepared for the ND/FONSI (Table 3 of the 1996 IS/EA, contained as Attachment L to this document) is applicable to the improvement project discussed in this Environmental Reevaluation/Addendum. Reevaluation of specific elements of the checklist resulting from new regulations and reconfigurations is described above.

V. ENVIRONMENTAL DETERMINATION

Analysis of the concept design plans, the project's relationship to the current surrounding environment, the approved final environmental document and impacts identified therein, and the preceding environmental reevaluation provide the basis for the following determinations:

- The proposed project does not result in any adverse impacts, and there are no new circumstances, or new information relevant to the project that would result in substantial environmental impacts not identified in the ND/FONSI previously approved. Therefore, a Supplemental ND/FONSI is not necessary.

VI. PUBLIC PARTICIPATION

Due to the limited scope of the proposed project and minimal right-of-way acquisition, a public hearing is not required.

VII. ENVIRONMENTAL REEVALUATION/ADDENDUM PERSONNEL

CALTRANS DISTRICT 7
Ron Kosinski, Deputy District Director, Division of Environmental Planning
Gary Iverson, Senior Environmental Planner
Robert J. Wang, Environmental Planner

RBF Consulting
Bruce R. Grove Jr., REA, Project Manager
Youji Yasui, Environmental Analyst

VIII. APPROVALS AND CONCURRENCES

Ron Kosinski 11-24-03 Cesar Perez 11/25/03

Ron Kosinski
Deputy District Director
Division of Environmental Planning
Caltrans District 7

Date

Cesar Perez
Team Leader - Southern Region
Federal Highway Administration

Date

IX. REFERENCES

Acoustical Screening Protocol, Firestone Boulevard Phase III Improvements, City of South Gate. RBF Consulting, June 26, 2003.

Air Quality Assessment for the Firestone Boulevard Phase III Improvement Project, City of South Gate, County of Los Angeles, State of California. RBF Consulting, July 25, 2003.

Biological Constraints Survey for the Interstate-710/Firestone Boulevard Phase III Project, City of South Gate, Los Angeles County, California. BonTerra Consulting, July 24,2003..

Department of Conservation, California Geological Survey website, www.consrv,ca.gov.

Firestone Boulevard Bridge Over Rio Hondo - Hydraulic Impacts, Memorandum. Psomas, July 18, 2003.

FIRM Flood Insurance Rate Map, Los Angeles County, California. Federal Emergency Management Agency, Federal Insurance Administration. December 2, 1980

General Soils Map, Los Angeles County, California. United States Department of Agriculture, Natural Resources Conservation Service, April 1994.

Initial Site Assessment: Route 710/Firestone Boulevard-Phase III Widening Memorandum. RBF Consulting, June 25, 2003.

Report and General Soil Map, Los Angeles County, California. United States Department of Agriculture, Soil Conservation Service, revised December 1969.

Initial Site Assessment Proposed Improvements to the I-710/Firestone Boulevard Interchange Final Report, South Gate, California, March 10, 1994.

Project Report on Route I-710 at the Firestone Boulevard Interchange, June 1997.

Roadway Analysis. RBF Consulting, July 2003.

Site Investigation (SI) Final Report, Proposed Improvements to the I-710/Firestone Boulevard Interchange, South Gate, California, May 24,1996.

South Gate General Plan, November 1986.

Supplemental Site Investigation Report Firestone Boulevard, I-710 Interchange Phase I, City of South Gate, California, December 5, 1997.

The Thomas Guide, Los Angeles and Orange Counties, 2003.

U.S. Army Corps of Engineers As-Constructed Plans for the Rio Hondo Channel, 1951.

United States Department of the Interior Geological Survey, South Gate Quadrangle. 1964, Photo Revised, 1981.

DUPLICATE

RECORDING REQUESTED BY
AND MAIL TO:

City of South Gate
8650 California Avenue
South Gate, CA 90280-3059

Space Above This Line Reserved for Recorder's Use

THIS DOCUMENT IS EXEMPT FROM DOCUMENTARY TRANSFER TAX PURSUANT TO SECTION 11922 OF THE REVENUE & TAXATION CODE

THIS DOCUMENT IS EXEMPT FROM RECORDING FEES PURSUANT TO SECTION 27383 OF THE GOVERNMENT CODE

Assessor's Identification Numbers:
6232-004-901 (Portion)
6232-007-906 (Portion)

EASEMENT

For a valuable consideration, receipt of which is hereby acknowledged, the LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, a body corporate and politic (hereinafter referred to as DISTRICT), does hereby grant to the CITY OF SOUTH GATE, a municipal corporation, (hereinafter referred to as GRANTEE), an easement for road and bridge purposes in, on, over, and across the real property in the City of South Gate, County of Los Angeles, State of California, described in Exhibit A attached hereto and by this reference made a part hereof.

Subject to all matters of record and to the following reservation and conditions which GRANTEE, by the acceptance of this Easement and/or the exercise of any of the rights granted herein, agrees to keep and perform, viz:

1. DISTRICT reserves the paramount right to use said land for flood control purposes.

2. GRANTEE agrees that it will not perform or arrange for the performance of any construction or reconstruction work in, on, over, and across the land herein-described until the plans and specifications for such construction or reconstruction work shall have first been submitted to and been approved in writing by the Chief Engineer of the Los Angeles County Flood Control District. Such approval by DISTRICT shall not be interpreted or inferred as an endorsement or approval as to the design, accuracy, correctness, or authenticity of the information shown on the submitted plans and specifications. Furthermore, such approval cannot be relied upon for any other purpose or by any third party for any reason whatsoever. DISTRICT does not accept ownership or responsibility for the improvements.

3. GRANTEE agrees that it shall indemnify and save harmless the DISTRICT, its officers, agents and/or employees, from any and all liability, loss or damage to which DISTRICT, its officers, agents and employees may be subjected as the result of any act or omission by GRANTEE, its officers, agents or employees, arising out of the exercise by GRANTEE, its officers, agents or employees of any of the rights granted to it by this instrument.

File with: RIO HONDO CHANNEL 450
Affects: Parcels 485, P-654F and P-648F
4-RW 20.1, 20.2, and 23
S.D. 1 M0423002

4. It is expressly understood that DISTRICT will not be called upon to construct, repair, maintain or reconstruct any structure or improvement to be erected or constructed pursuant to this Easement.

5. The provisions and agreements contained in this Easement shall be binding upon GRANTEE, its successors and assigns.

To the extent any lawful assessment be levied pertaining to the area to which this easement applies and to the extent that the assessment is based on the structures and improvements being constructed under the authority of this easement and provided further that the assessment be levied following GRANTEE's exercise of these easement rights to construct such structures and improvements, GRANTEE agrees to pay on behalf of DISTRICT that part of any such assessment levied against DISTRICT which is based on the value contributed to that area by GRANTEE's said improvements.

Dated_____

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT,
a body corporate and politic

By_____
Chair, Board of Supervisors of the
Los Angeles County Flood Control District

(LACFCD-SEAL)

ATTEST:

VIOLET VARONA-LUKENS, Executive Officer
of the Board of Supervisors
of the County of Los Angeles

By_____
Deputy

OG:ayc
P:\Con\E riohndo ch 450.doc

NOTE: Acknowledgment form on reverse side.

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

On January 6, 1987, the Board of Supervisors for the County of Los Angeles and ex officio the governing body of all other special assessment and taxing districts, agencies and authorities for which said Board so acts adopted a resolution pursuant to Section 25103 of the Government Code that authorized the use of facsimile signatures of the Chair of the Board on all papers, documents, or instruments requiring the Chair's signature.

The undersigned hereby certifies that on this ____ day of _____, 20____, the facsimile signature of _____, Chair of the Board of Supervisors of the LOS ANGELES COUNTY FLOOD CONTROL DISTRICT was affixed hereto as the official execution of this document. The undersigned further certifies that on this date, a copy of the document was delivered to the Chair of the Board of Supervisors of the LOS ANGELES COUNTY FLOOD CONTROL DISTRICT.

In witness whereof, I have also hereunto set my hand and affixed my official seal the day and year above written.

VIOLET VARONA-LUKENS, Executive Officer
of the Board of Supervisors
of the County of Los Angeles

By_____
Deputy

(LACFCD-SEAL)

APPROVED AS TO FORM:

RAYMOND G. FORTNER, JR.,
County Counsel

By_____

APPROVED as to title and execution,

_____, 20_____.

DEPARTMENT OF PUBLIC WORKS
Mapping & Property Management Division

Supervising Title Examiner

By_____

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the within deed or grant dated _____ from Los Angeles County Flood Control District, a body corporate and politic, to the City of South Gate, a municipal corporation, is hereby accepted by order of the City Council of the City of South Gate, on _____, pursuant to authority conferred by resolution of said City Council adopted on _____, and the grantee consents to the recordation thereof by its duly authorized officer.

Dated_____

By_____

P:Conf:flodfax.2 W accpt.doc

EXHIBIT A

File with: RIO HONDO CHANNEL 450
Affects: Parcels 485, P-654F and P-648F
4-RW 20.1, 20.2 and 23
A.P.N. 6232-004-901 (portion)
6232-007-906 (portion)
T.G. 705(G4)
I.M. 084-237
First District
M0423002

LEGAL DESCRIPTION

PART A (Easement for road and bridge purposes):

That portion of Lot A, Tract No. 486, as shown on map recorded in Book 15, pages 30 and 31, of Maps, in the office of the Registrar-Recorder/County Clerk of the County of Los Angeles, described in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book 45503, page 272, of Official Records, in the office of said Registrar-Recorder/County Clerk, within the following described boundaries:

Commencing at the intersection of the center line of Firestone Boulevard, as said center line shown on map filed in Book 98, page 57, of Record of Surveys, in the office of said Registrar-Recorder/County Clerk, with the southwesterly prolongation of the northwesterly line of that certain parcel of land described in deed to said district; thence North 35°06'08" East along said southwesterly prolongation, a distance of 45.04 feet to a line parallel with and 40.00 feet northerly, measured at right angles, from said center line; thence South 82°14'55" East along said parallel line, a distance of 27.37 feet to the TRUE POINT OF BEGINNING; thence North 35°21'33" East 15.80 feet to a line parallel with and 54.00 feet northerly, measured at right angles, from said center line; thence South 82°14'55" East along said last mentioned parallel line, a distance of 345.38 feet to that certain course described as having a length of 118.27 feet in deed to Santo F. Tedesco, et al., recorded in Book D918, page 631, of said Official Records; thence South 8°22'52" West 14.00 feet to said first mentioned parallel line; thence North 82°14'55" West 352.54 feet, along said first mentioned parallel line to the true point of beginning.

Containing: 4,885± square feet

EXHIBIT A

PART B (Easement for road and bridge purposes):

That portion of that certain parcel of land in Lot 1 of the I. Heyman Tract, as shown on map recorded in Book 7, page 249, of Deeds, in the office of the above-mentioned Registrar-Recorder/County Clerk, described in deed to LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, recorded in Book 51773, page 402, of above-mentioned Official Records, within the following described boundaries:

Beginning at the intersection of a line parallel with and 40.00 feet southerly, measured at right angles, from above-mentioned center line of Firestone Boulevard, with the southeasterly line of that certain parcel of land described in said last mentioned deed to said district; thence North 82°14'55" West 403.78 feet along said parallel line to the westerly line of that certain parcel of land described as PARCEL NO. P-654F in deed to said district, recorded on November 29, 2001, as Document No. 01-2270526, of said Official Records; thence South 21°22'15" West 14.41 feet along said westerly line and its southerly prolongation to a line parallel with and 54.00 feet southerly, measured at right angles, from said center line; thence South 82°14'55" East along said last-mentioned parallel line, a distance of 358.88 feet; thence North 7°36'11" East 2.00 feet; thence South 82°23'49" East 42.15 feet to said southeasterly line: thence North 35°06'08" East 13.39 feet along said southeasterly line to the point of beginning.

Containing: 5,541± square feet

Total area of PARTS A and B containing: 10,426± square feet